

Electoral Area Services Committee

Thursday, May 17, 2018 - 4:30 pm

The Regional District of Kootenay
Boundary Board Room, RDKB Board Room,
843 Rossland Avenue, Trail, BC

A G E N D A

1. CALL TO ORDER
2. ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

A) May 17, 2018

Recommendation: That the May 17, 2018 Electoral Area Services Agenda be adopted as presented.

3. MINUTES

A) **April 12, 2018**

The April 12, 2018 Electoral Area Services meeting minutes were not available at the time the agenda was published.

4. DELEGATIONS

5. UNFINISHED BUSINESS

A) **Memorandum of EAS Committee Action Items**

Recommendation: That the Memorandum of Committee Action Items be received.

[ToEndOfAprilforMay2018](#)

B) **Braeden and Melina Black**

RE: Development Variance Permit

1692 Columbia Gardens Road, Electoral Area 'A'

RDKB File: A-1236-05301.010

Recommendation: That the Development Variance Permit application submitted by Braeden and Melina Black to allow for a 2.5 metre side yard and 1.0 metre rear yard variance to construct a garage on the property legally described as Lot 2, Plan NEP4628, DL 1236, KD, Electoral Area 'A', be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation of support.

[2018-05-07 Black DVP EAS](#)

6. NEW BUSINESS

A) **Big White Resort Ltd.**

RE: Bylaw Amendment

Unsurveyed Crown land SE of Big White Road and Black Forest Way
RDKB File: BW-4253-Temp. Black Forest

Recommendation: That the application submitted by Brent Harley and Associates Inc. on behalf of Big White Resort Ltd. to amend the Big White Official Community Plan Bylaw No. 1125 and the Big White Zoning Bylaw No. 1166 to allow for staff housing and a Hostel on unsurveyed Crown Land south east of Big White Road and Black Forest Way, be supported, and further, that staff be directed to draft amendment bylaws for presentation to the Regional District of Kootenay Boundary Board of Directors for first and second readings and to schedule and hold a public hearing on the proposed bylaw amendments.

[2018-05-09 rezone EAS](#)

B) **Michael Strelbisky and Darcy Milligan**

RE: Development Variance Permit

12 Chase Road, Christina Lake
RDKB File: C-317-02535.930

Recommendation: That the Development Variance Permit application submitted by Michael Strelbisky and Darcy Milligan to allow for a reduced interior side yard setback for an accessory building greater than 10m² in area from 3 metres to 1.5 metres – a 1.5 metre variance and an increase to the maximum height for an accessory building from 4.6 metres to 5.5 metres – a 1.1 metre variance, on the property legally described as Parcel F, Plan KAP28028, DL 317, SDYD, Electoral Area 'C'/Christina Lake be presented to the Regional District of Kootenay

Boundary Board of Directors for consideration, with a recommendation of support.

[2018-05-11 DVP EAS-Strelbisky](#)

C) **RAVESTEIN, Hendrik and SMIENK, Johannes**

RE: Industrial Development Permit

301 and 305 Courtesy Road, Genelle

RDKB File: B-2404-06180.200

Recommendation: That the staff report regarding the Development Permit application submitted by Johannes Smienk and Hendrik Ravestein to construct a meter building in the Genelle/Rivervale Industrial Development Permit Area on the parcel legally described as District Lot 2404, KD, Genelle, Electoral Area 'B'/Lower Columbia-Old Glory, be received.

[2018-05-09 DP-EAS-Ravestein](#)

D) **David Heubner and Daniel Kaufman**

RE: MOTI Referral

28 Mulher Road, Beaverdell

RDKB File: E-1545-00118.050

Recommendation: That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed subdivision, for the parcel legally described as District Lot 1545, SDYD Beaverdell, Electoral Area 'E'/West Boundary be received.

[2018-05-10 EAS-Heubner](#)

E) **Gas Tax Application**

RE: Boundary Museum Society Exhibition Extension Project

Recommendation: That the gas tax funding application by the Boundary Museum Society in the amount of \$60,000.00 to build a 40' x 60' addition to the existing Black Hawk Livery building be forwarded to the Regional District of Kootenay Boundary Board of Directors with a recommendation of approval.

[Boundary Museum Grant Application 11Apr18](#)

F) **Grant in Aid Report**

Recommendation: That the Grant in Aid Report be received.
[2018 Grant in Aid](#)

G) **Gas Tax Update**

Recommendation: That the Gas Tax Update be received.
[Gas Tax Agreement](#)

H) **Real Estate Speculation Regarding Large Agricultural Parcels
Discussion (Director Gee)**

7. LATE (EMERGENT) ITEMS
8. DISCUSSION OF ITEMS FOR FUTURE AGENDAS
9. CLOSED (IN CAMERA) SESSION
10. ADJOURNMENT

**RDKB MEMORANDUM OF
ELECTORAL AREA SERVICES COMMITTEE
ACTION ITEMS**

Action Items Arising from Electoral Area Services Committee Direction (Task List)

Pending Tasks

Date	Item/Issue	Actions Required/Taken	Status – C / IP
Mar. 16/17	New funding streams for projects that don't Qualify for Gas Tax or GIA	CAO Mark Andison (staff) will look into options	IP
Apr. 13/17	Bylaw Enforcement	EAS direct Staff to outline process and implications	IP
	0980131 BC Ltd. - MoTI Subdivision	Dedication of cash in lieu of park land-Monashee – previously known as High Forest	IP
June 15/17	Service budgets on web	Staff to initiate	IP
Sept. 14/17	George DVP	Sent to Staff to discuss with applicant	IP
Nov. 16/17	Darbyshire (OCP & Zoning Amendments)	Present Bylaws to Board and hold Public Hearing pending ALC decision	IP
Jan. 12/18	Logging in Watersheds	Staff to contact forestry companies operating in the Kelly Creek Watershed to request referrals	IP
	RDKB Swag	Incorporate use of swag into Corporate Communications Plan	IP
	Planning Agreements	Add wording from Agreements to invitations to municipal directors	IP
Feb. 15/18	643249 BC/Strege – MoTI Subdivision	Staff forward comments to MoTI and discuss park dedication requirements with applicant	IP
	Browne-Clayton – MoTI Subdivision	Staff work with applicant re park dedication	IP
	Marijuana Issue	Staff forward information packages to Area A, B, C and E APC's	IP
March 15/18	Bylaw Enforcement Statistics	Staff to create biannual reports to EAS	IP

Tasks from Electoral Area Services Committee Meeting April 17, 2018

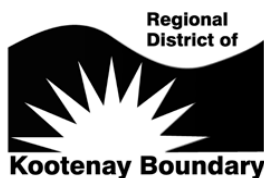
Date	Item/Issue	Actions Required/Taken	Status – C / IP
Apr. 17	Black DVP	Deferred to allow applicant to address APC concerns	C
	Veitch DVP	Forwarded to Board for approval	C

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Memorandum of Committee Action Items

Electoral Area Services to the End of April 2018

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ELECTORAL AREA SERVICES (EAS) COMMITTEE STAFF REPORT

Date:	May 7, 2018	File #:	A-1236-05301.010
To:	Chair Worley and Members of the Electoral Area Services (EAS) Committee		
From:	Ken Gobeil, Planner		
RE:	Development Variance Permit Application		

ISSUE INTRODUCTION

The RDKB has received an application for a Development Variance Permit for the placement of a garage in the south east corner of 1692 Columbia Gardens Road, in Electoral Area 'A' (see Site Location Map; Subject Property Map; Applicant Submission).

During the April 2018 APC meeting, the APC reviewed this application and recommended deferring a recommendation due to concerns about potential snow shedding and septic plans. The EAS supported then deferred their review of the application to allow the applicant time to address concerns raised by the APC.

HISTORY / BACKGROUND INFORMATION

Property Information	
Owner(s):	Braeden and Melina Black
Location:	1692 Columbia Gardens Road
Legal Description:	Lot 2, Plan NEP4628, DL 1236, KD
Area:	688 square metres (0.17 acres)
Current Use(s):	Single Family Dwelling
Land Use Bylaws	
OCP Bylaw No. 1410	Rural Residential 1
DP Area	NA
Zoning Bylaw No. 1460	Rural Residential 1 (R1)
Other	
ALR:	NA
Waterfront / Floodplain	NA

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The subject property is adjacent to the Village of Fruitvale on the east side of Columbia Gardens Road near the intersection of Columbia Gardens Road and Tamarac Road. There is one dwelling and a small shed on the property (see Site Location Map; Subject Property Map). This property is within the Fruitvale Planning Agreement Area.

PROPOSAL

The applicant is proposing to place a 63 square metre 2-car garage in the back corner of the property. The application form states that the walls of the building will be placed 1 metre from the back and side property lines and the proposed roof overhang will be 0.5 metres (see, Applicants' Submission). The requested variances are as follows:

- To decrease the interior side setback for an accessory building from 3.0 metres to 1 metre – a 2.0-metre variance
- To decrease the rear yard setback for an accessory building from 1.5 metres to 1.0 metre – a 0.5-metre variance.

IMPLICATIONS

The siting exceptions in section 307.3 of the Zoning Bylaw will apply to the roof overhang. A 0.5 metre roof overhang is proposed on all sides. The edge of the roof to the interior side will be 0.5 metres. The edge of the roof to the rear of the property will be 0.5 metres. The R1 Zone does not have site coverage or building height requirements.

In considering applications for Development Variance Permits, the RDKB generally considers whether the proposed variance will:

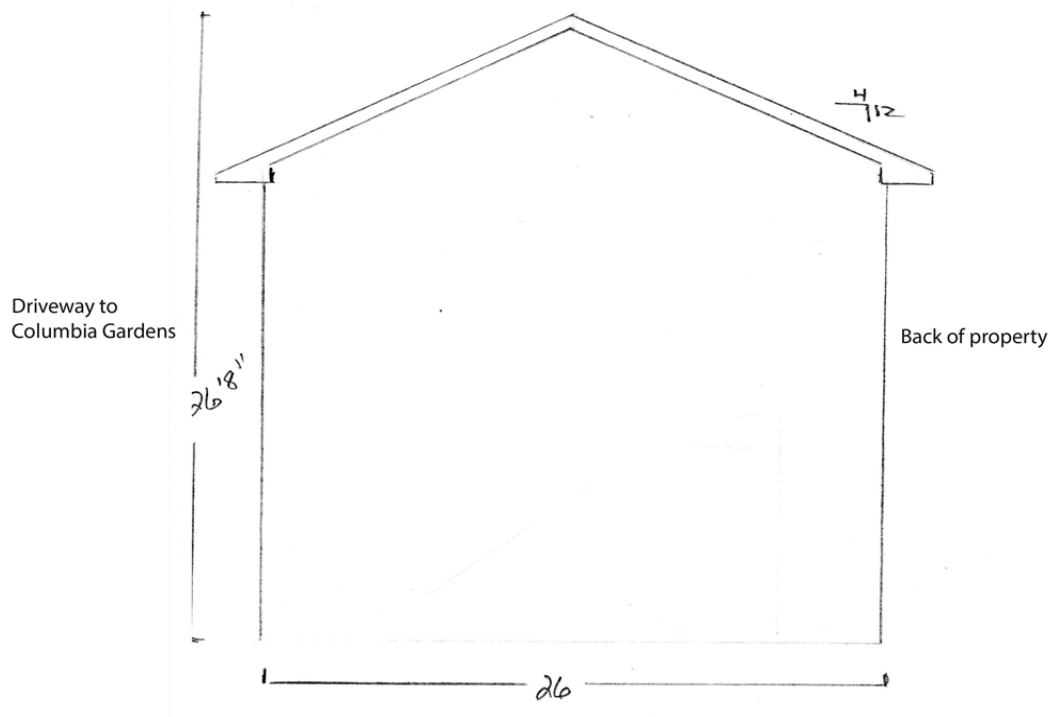
- a) Resolve a hardship;
- b) Improve the development;
- c) Cause negative impacts to the neighbouring properties.

The applicant has addressed each one of these points (see Applicants' Submission). The supporting statements are summarized and paraphrased below.

- a) Two hardships were identified by the applicants:
 1. The placement of this building in the back corner of the property will not interfere with the existing septic system that is in the back yard of the property.
 2. The placement of the building with as much separation from the house as possible will allow for easier vehicle access to park vehicles in the building.
- b) Improvements were not identified by the applicants.
- c) The applicant claims that there will be no negative effect on nearby property owners.

During the April 3, 2018 Electoral Area 'A' APC meeting the APC noted concerns regarding snow shedding onto other properties and the potential need for a location of a new septic field should the existing system fail.

The Planning Department had asked the applicant to respond to the concerns noted by the APC during their April meeting. The applicant noted that professional building plans have not been completed at this time. However, their intent is that the roof will be designed to hold snow and gutters would be installed to manage water runoff. They plan to have the roof slopes pointed to the front and back of the property. The Applicant attached the following drawing to illustrate their proposed building. This drawing includes height, width, and roof pitch.



The Building Inspection Department was asked to comment on the roof design. Upon their review, it was noted that a 4/12 pitched roof with asphalt shingles will not shed snow. If a metal roof were used, snow stops would need to be installed on the roof to stop snow from falling. It was also noted that a cement slab on grade may not damage tree roots compared to other construction methods.

Within this application, the current septic system will be avoided by the proposed building. The applicant has noted that they have no plans to replace or add onto the septic tank or absorption field at this time.

In the event a septic system fails, the existing tank that was noted in the applicant's submission can be replaced in the same location. The location of potential future absorption fields would depend on the type of system chosen and needs of the

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property.

ADVISORY PLANNING COMMISSION (APC)

The May 8, 2018 Electoral Area 'A' APC meeting was cancelled due to scheduling conflicts. However, the APC did review the new information and submitted comments via email from its members for consideration:

The APC comments favor acceptance of the proposal subject to the neighbors have been notified and have accepted the proposal.

ADVISORY PLANNING COMMISSION (APC)

Surrounding landowners are notified of proposed Development Variance Permit applications as part of the RDKB's regular procedure. The public and surrounding land owners are given opportunity to provide comments or express concerns, which are considered by the Board of Directors.

RECOMMENDATION

That the Development Variance Permit application submitted by Braeden and Melina Black to allow for a 2.5 metre side yard and 1.0 metre rear yard variance to construct a garage on the property legally described as Lot 2, Plan NEP4628, DL 1236, KD, Electoral Area 'A', be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation of support.

ATTACHMENTS

Site Location Map
Subject Property Map
Applicant Submission





APPLICANT SUBMISSION

- Rear parcel line setback variance of 0.5m - from 1.5m to 1m
- Interior side parcel line setback variance of 2m - from 3m to 1m

This variance solves two hardships and has no negative impact on our neighbours. First the rear setback allows a second vehicle to enter the double car garage with greater ease, since without it the garage would be too close to the primary structure. Second the interior setback allows the double car garage to not interfere with the existing septic tank, as well as improving vehicle access. There are no negative effects to the three neighbouring properties, primary due to lot sizes and primary building locations on those lots.

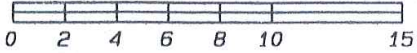
APPLICANT SUBMISSION

B.C. LAND SURVEYOR'S
CERTIFICATE OF LOCATION OF:

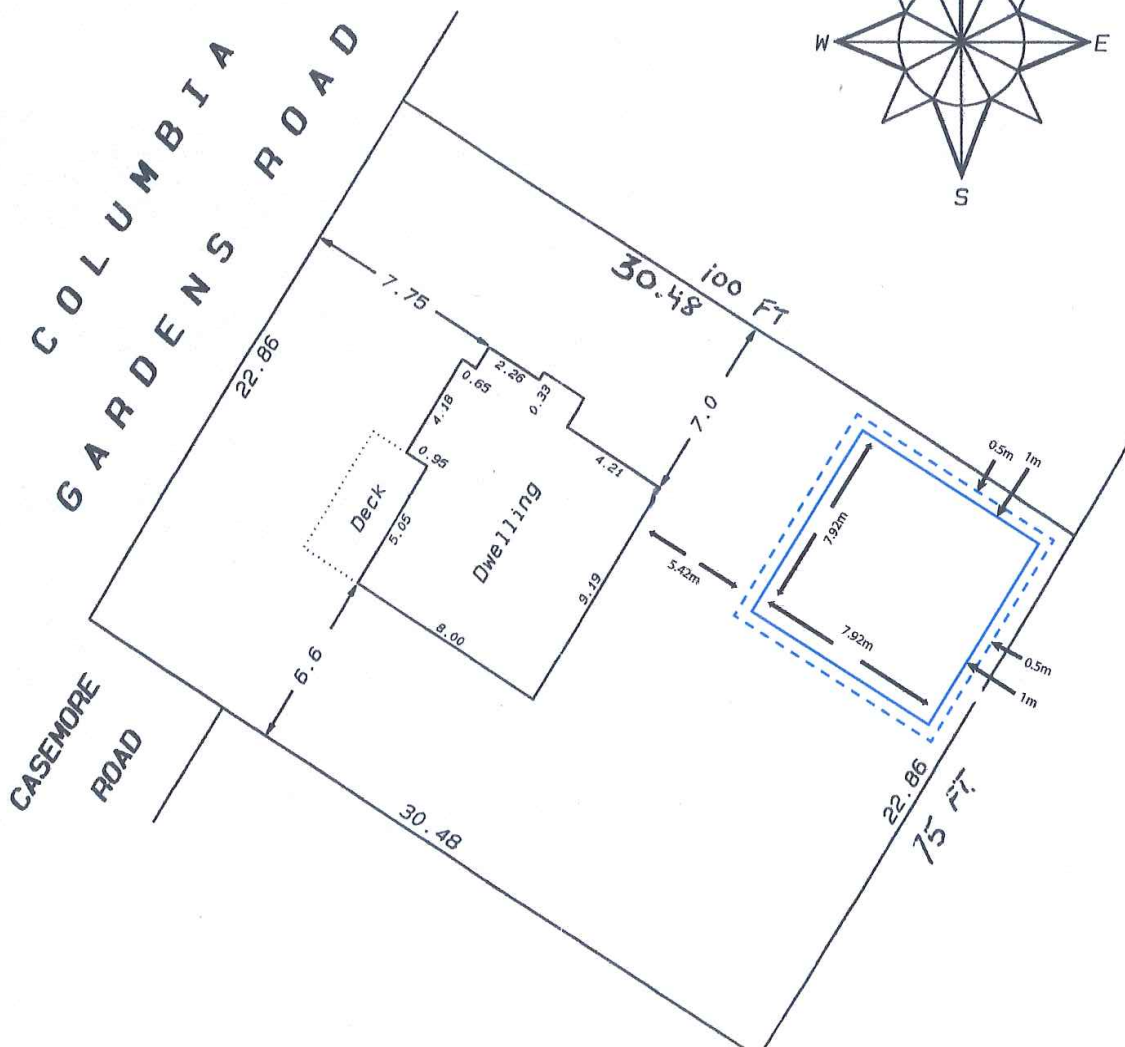
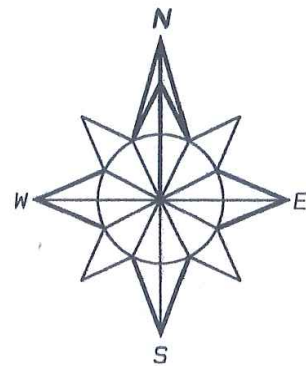
LOT 2,
DISTRICT LOT 1236,
KOOTENAY DISTRICT,
PLAN 4628

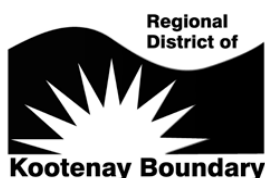
CIVIC ADDRESS: 1692 Columbia Gardens Rd.
Fruitvale, B.C.

Scale 1: 250



All distances are in metres.





ELECTORAL AREA SERVICES (EAS) COMMITTEE STAFF REPORT

Date:	May11, 2018	File #:	BW-4253-Temp. Black Forest
To:	Chair Worley and members of the Electoral Area Services Committee		
From:	Ken Gobeil, Planner		
RE:	Bylaw Amendment Application – Big White		

ISSUE INTRODUCTION

The RDKB has received an application for a bylaw amendment to lands within the Black Forest area of Big White, Electoral Area 'E' / West Boundary (see Site Location Map; Subject Property Map; Applicant Submission).

This application was reviewed by the APC and EAS Committees in March 2018. During the March EAS meeting a decision was deferred until additional information could be provided by the applicant. This included:

- An updated Secondary Plan that was submitted as part of the application
- Notification from the provincial government that a Crown Grant had been applied for regarding the subject property.
- Clarification on how the proposed development will meet the definition of a hostel

HISTORY / BACKGROUND INFORMATION

Property Information	
Owner(s):	Crown
Applicant:	Christine Bilodeau (Brent Harley and Associates Inc.) on behalf of Big White Resort Ltd.
Location:	Un-surveyed Crown Land south east of Big White Road and Black Forest Way
Electoral Area:	Electoral Area 'E' / West Boundary
Legal Description(s):	Proposed Parcel in the vicinity of DL 4253 (Un-surveyed crown land)
Area:	0.445 hectares
Current Use(s):	Vacant

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Land Use Bylaws	
Official Community Plan Bylaw No. 1125	Black Forest Future Growth Area
Zoning Bylaw No. 1166	Recreational Resource 1
Other	
Waterfront / Floodplain	Unnamed Creeks

The subject property is located on the south east side of the intersection between Big White Road and Black Forest Way. Black Forest Way, and properties along this road have been identified as future growth areas in Big White since the mid-1990s.

In 2008, a Secondary Plan and Bylaw amendment were submitted for 9 development pods along Black Forest Way for future development. The Secondary Plan identified Chalet Residential 3 as the preferred zone because of the housing need identified at the time.

In 2017, the RDKB approved a bylaw amendment for one of these pods (District Lot 4255) to allow for a staff housing facility. The bylaw amendment was approved, because of the immediate need for staff housing despite not being identified in the 2008 Secondary Plan.

The 2017 bylaw amendment included a rezone, from Chalet Residential 3 to a new Employee Housing Residential 6A, which included amended parking regulations (covered parking not required). A development permit has been issued and construction has started on one of the four proposed buildings.

PROPOSAL

The intent of this application is to allow construction of a hostel or staff housing facility. A hostel is defined as a form of commercial accommodation where beds are rented out individually to travellers and no single rented room or bed has its own sanitary or cooking facilities.

This will require amendments to the Official Community Plan and Zoning Bylaw. Because this area is within the Black Forest Future Growth Area, a Secondary Plan is required, and has been submitted as part of the application.

The applicant proposes to rezone a 0.445 hectare area to Employee Housing Residential 6A. In conjunction, the applicant proposes to add hostel to the list of permitted uses (see Applicants' Submission).

The following Official Community Plan amendments are also requested:

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- A land use designation change of the area is requested to redesignate from Resource Recreational to Medium Density Residential.
- The Commercial and Multiple Family Development Permit Area, and the Alpine Environmentally Sensitive Landscape Reclamation Development Permit Areas are proposed to be expanded to include this area.

The Secondary Plan attached to the bylaw amendment proposal indicates that an additional 18 units (88 total beds) would be created.

IMPLICATIONS

Lands that are within the Black Forest Future Growth Area require a Secondary Plan to establish land uses and regulate future growth of lands. Secondary Plans are required to:

- a) provide direction for subdivision, development and land use;
- b) conform to the Big White Official Community Plan; and
- c) describe the density of population; the proposed sequence of development; and the location of existing and proposed roads and utilities.

Further requirements of Secondary Plans are described in section 3.3.2 of the Official Community Plan.

The Secondary Plan and supporting documents that were submitted in 2008 have been amended to update the report with new information and supporting clauses for hostels and staff housing that reflect the current needs of Big White (see, Black Forest Secondary Plan 2018). Due to the size and location of the subject area, it is appropriate to include it within the 2008 Secondary Plan. Since the 2008 Secondary Plan was reviewed and endorsed, many of the requirements of a Secondary Plan have already been considered.

The 2017 bylaw amendment was specifically for staff housing. By including a hostel as a permitted use in this zone, it will create an opportunity for commercial vacation accommodation developments to have uncovered parking. This is a reduced parking standard that was granted specifically for resort staff housing. This proposed amendment will potentially provide an opportunity for the existing staff housing development to be re-purposed as hostel, which is not the intent of the bylaw amendment in 2017.

Access to the subject property would be via Black Forest Way. Being adjacent to Big White Road, there will be minimal upgrades required, and it will be easy to tie into existing ski routes. The ski bridge over Big White Road is immediately south of the proposed property. Ski routes will be protected by registering a covenant on the titles of newly created properties. Being adjacent to Big White Road will also require minimal upgrades to existing utility lines. No new public transportation routes or pedestrian transportation were identified.

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The slope analysis that was provided as part of the Secondary Plan indicates that most of the subject area has a slope less than 20%, which would be acceptable for high-density developments such as hostels and staff housing dormitories as proposed in the bylaw amendment. Geotechnical reports may be required prior to construction as part of the building permit process.

On April 19, 2018 a revised Secondary Plan was submitted to the RDKB. This Secondary Plan included an updated Drainage Plan and Water Supply System Plan. The Drainage Plan was updated to include the subject property. Developing this new area will not have any negative effects to drainage down stream in Big White. The revised Water Supply System Plan included updates to the water system that took place in 2015. These updates were the inclusion of a UV water treatment system.

It was noted that Black Forest will require an additional 4.97 litres per second to the daily demand of water and a peak of 7.5 litres per second additional water demand. The current supply is insufficient without bypassing filters, which is possible due to upgrades in 2015.

The report also includes a recommendation that water capacity and fire flow (for multi-family developments this is 150 litres per second for 2 hours) should be verified for each new building in the Black Forest area of Big White (See, Black Forest Secondary Plan, 2018).

Reviewing water for fire flow for every new building is not a common practice by the RDKB Building Inspection Department and would be difficult to implement for every building as single family dwellings and smaller multiple family dwellings are exempt from this requirement in the Building Code.

Upon review of the Water Supply System Plan in the revised Secondary Plan the Building Inspection Department provided the following clarification on fire suppression standards for new building construction:

The British Columbia Building Code does have requirements for water supply for some buildings. When a building is subject to the requirements of Part 3 of the code an adequate water supply or a fire suppression system is necessary. Part 3 of the code covers larger residential buildings and commercial buildings. Conformance with this requirement would be the task of the architect who is acting as the Registered Professional of Record for the project. The Building Department would determine conformance with this requirement during the plan review process. There are no requirements in Part 9 of the code for water supply. Part 9 covers single family dwellings, smaller multifamily dwellings (three stories or less and under 600m²) and some commercial type buildings.

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The Big White Fire Department had also shared concern regarding the water supply capacity. The Big White Fire department spoke directly with the Big White Mountain Operations for clarification on the proposal and water utility. Big White Mountain operations assured the Big White Fire department that there was sufficient capacity for fire fighting purposes currently, and for the future development areas in Black Forest.

Creating a new spot zone that permits hostels with no reduction in parking standards, or adding hostel to an existing zone with no reduced parking standards may be alternative options that will allow for a hostel development on the proposed property (see Draft Zone).

Concept plans provided show a proposed development that does not meet the definition of a hostel in the Zoning Bylaw. To date there has been no building permit or development permit application submitted. Applications for development will be reviewed for bylaw compliance when they are submitted.

ADVISORY PLANNING COMMISSION (APC)

The bylaw amendment application was discussed in length by the Big White APC during their March 6, 2018 meeting. The application was supported by the following rationale:

- *Additional low cost employee housing is required but not always occupied and adding a hostel to permitted uses allow for cost recovery*
- *Hostel users might take over from employee use if rents rise.*
- *BWSR needs employee housing and is committed to building and supplying housing for staff.*

The APC also had discussion regarding concerns of covered parking spaces to recreational areas in single family dwellings. The Zoning Bylaw does not require covered parking for single family dwellings or duplexes.

MARCH 2018 EAS RECOMMENDATION

That the application submitted by Brent Harley and Associates Inc. on behalf of Big White Resort Ltd. to amend the Big White Official Community Plan Bylaw No. 1125 and the Big White Zoning Bylaw No. 1166 to allow for a Hostel on unsurveyed Crown Land south east of Big White Road and Black Forest Way, be deferred until additional information is provided by the applicant.

PLANNING AND DEVELOPMENT COMMENTS

The RDKB has contacted Big White to understand technical information and future implications of the recommendations within the Water Supply System Plan that has been updated in the April 2018 Secondary Plan.

Crown Grant

On April 11, 2018 the RDKB received a referral from the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development for a Crown Grant application for the subject property. This application is described in a separate report.

Development Plans

The agent for the applicants have indicated that at the time of this report, building plans have not been created for the specific development proposed on this property. The agents noted that when the bylaw amendment is endorsed. The applicant will submitted a Development Permit application that will have specific details on how the proposed development will meet the definition of hostel and/or staff housing, as well as comply with all Development Permit and Zoning Bylaw requirements.

Bylaw Amendment

The rationale used for the APC's support of the bylaw amendments may be contradictory regarding the need for covered parking. The rationale statements support profitability of commercial housing opportunities rather than allowing concessions to staff housing for covered parking.

The original intent of this zone was for staff housing only. A hostel is a commercial accommodation similar to a hotel; a business designed to make money. Staff housing is not a business or commercial enterprise. It is specifically for housing resort staff, not guests visiting the resort.

Relaxed covered parking conditions for guests could be taking advantage of a special concession that was granted under the condition that the development be used for staff housing. Allowing these parking requirements for guest accommodations would not have been supported in 2017. It will also detract from the overall experience at Big White for guests staying at the hostel, and could increase complaints regarding parking and vehicle access. Complaints regarding parking and snow removal are common in Big White.

The Big White APC notes concerns with covered parking and its shortage later in the minutes of their March 2018 meeting. It appears inconsistent to support a bylaw amendment to allow development of uncovered parking and identify an existing covered parking shortage. Most Development Variance Permit applications in Big White were not supported by the APC in 2017 and 2018 primarily due to snow storage and vehicle access concerns.

This proposed bylaw amendment removes any incentive for staff housing which is less profitable. Reserving staff housing as a single permitted use with specific parking concessions to promote the use compared to other commercial housing options is necessary to help reduce the housing shortage in Big White.

The Planning Department suggests that a new zone be created specifically for hostels and staff housing, that does not give any concessions for parking. This will ensure that

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staff housing is preserved, and covered parking requirements are not reduced for tourists visiting the resort.

RECOMMENDATION

That the application submitted by Brent Harley and Associates Inc. on behalf of Big White Resort Ltd. to amend the Big White Official Community Plan Bylaw No. 1125 and the Big White Zoning Bylaw No. 1166 to allow for staff housing and a Hostel on unsurveyed Crown Land south east of Big White Road and Black Forest Way, be supported, and further, that staff be directed to draft amendment bylaws for presentation to the Regional District of Kootenay Boundary Board of Directors for first and second readings and to schedule and hold a public hearing on the proposed bylaw amendments.

ATTACHMENTS

Site Location Map

Applicant Submission

Black Forest Secondary Plan (2018)

Draft Zone: R6B Hostel Zone

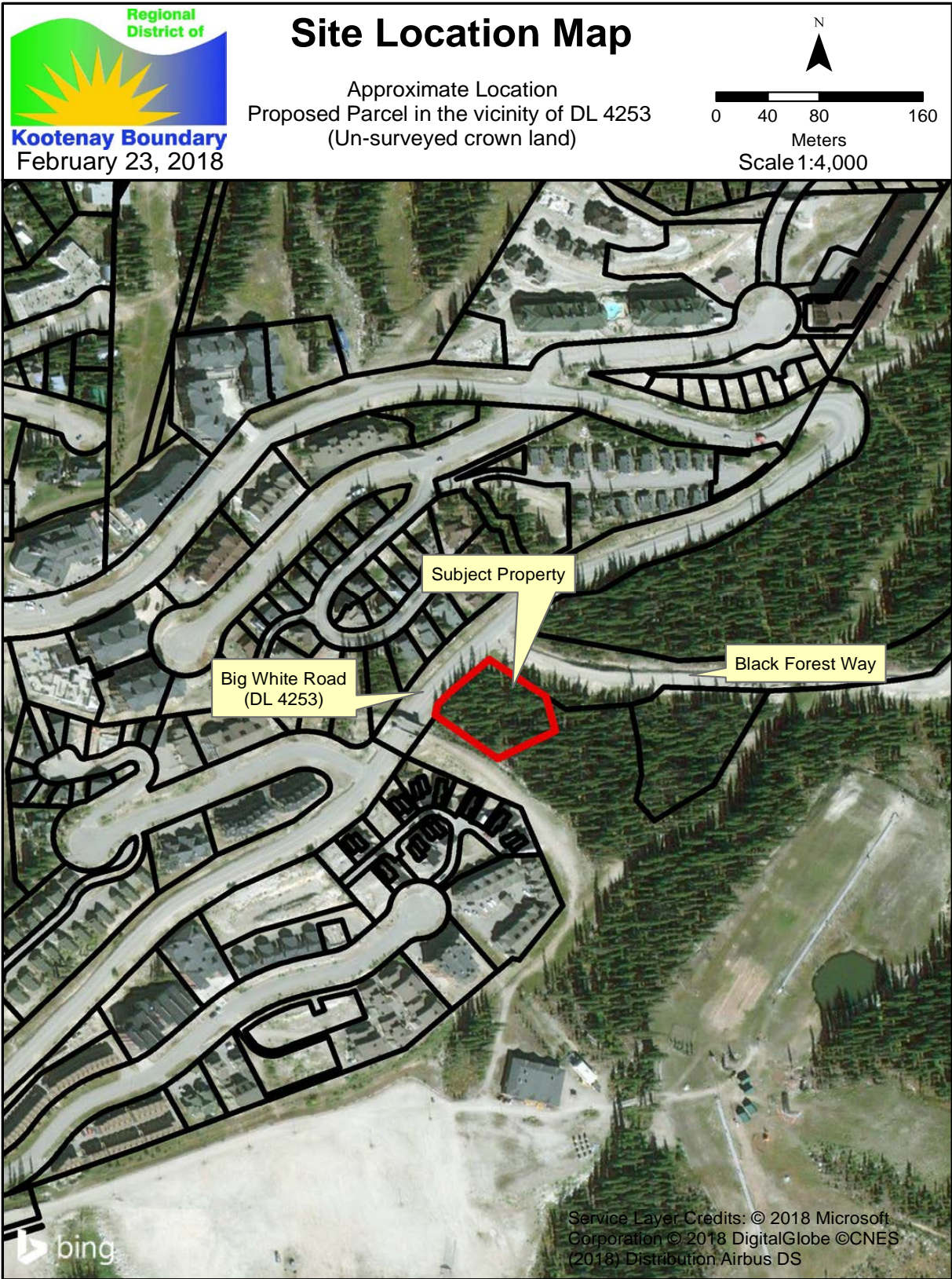


Figure 1. Black Forest at Big White Context Map

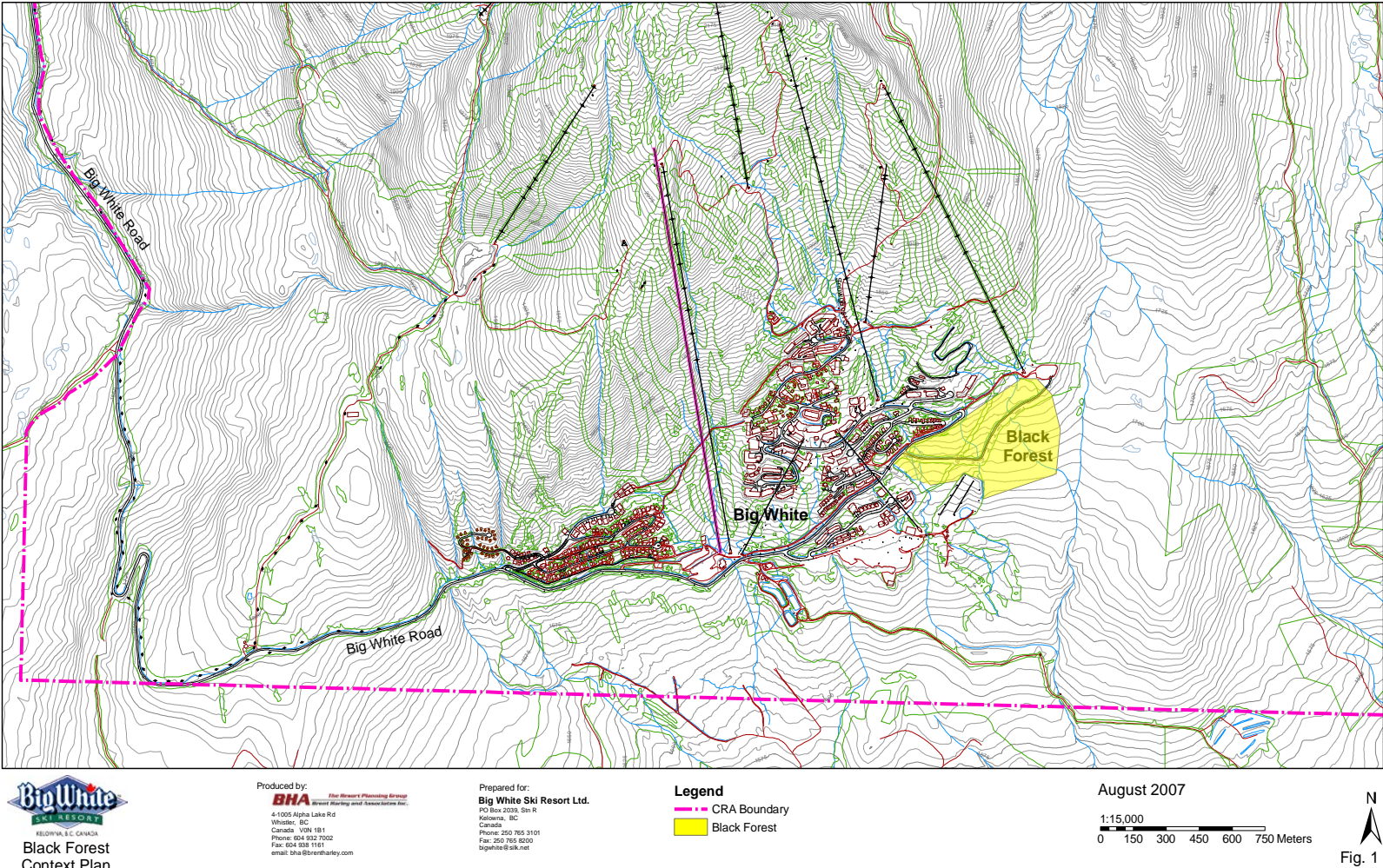


Figure 2. Black Forest at Big White - Surveyed Parcels

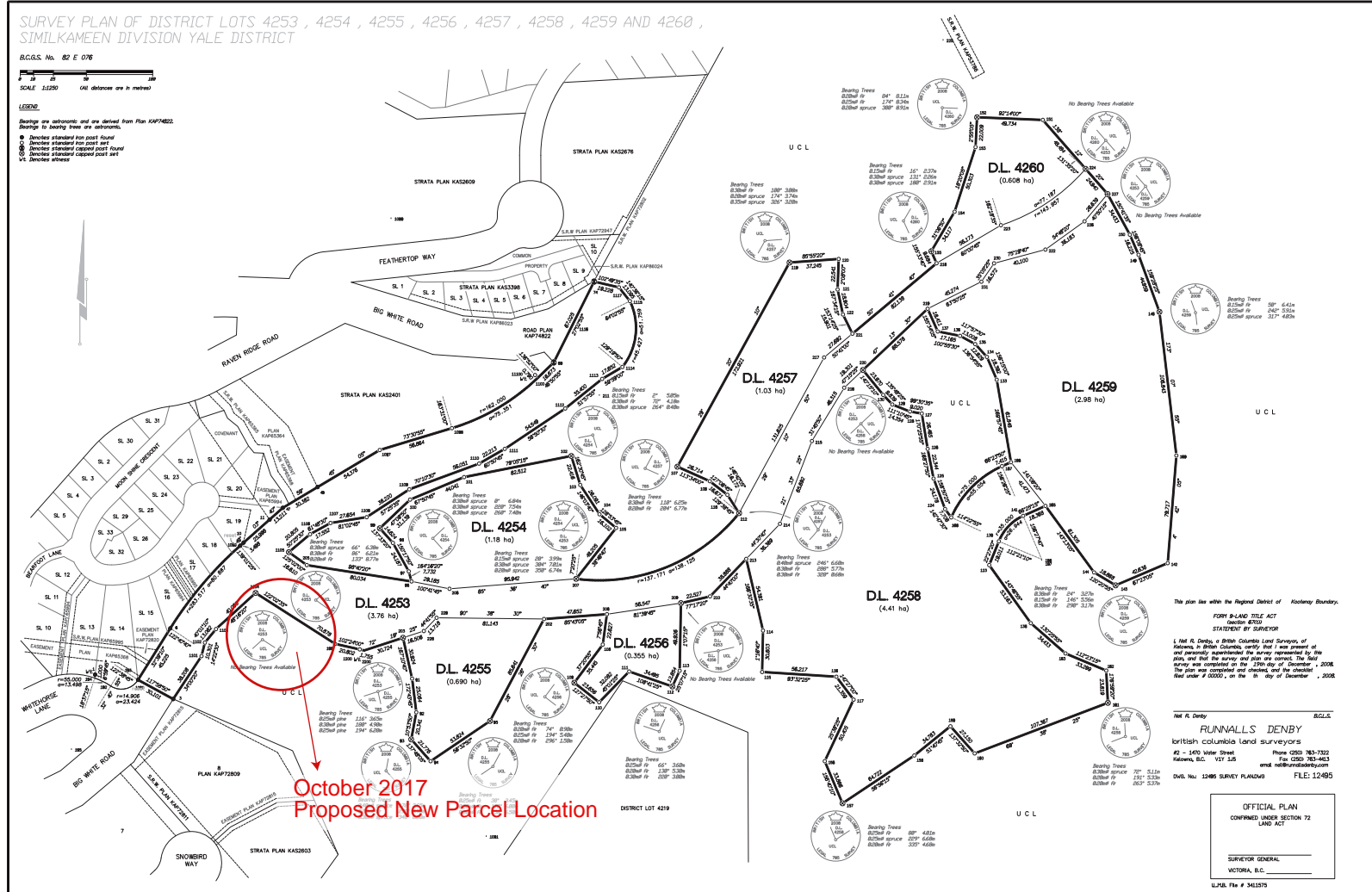


Figure 3. Black Forest at Big White - Surveyed Parcels

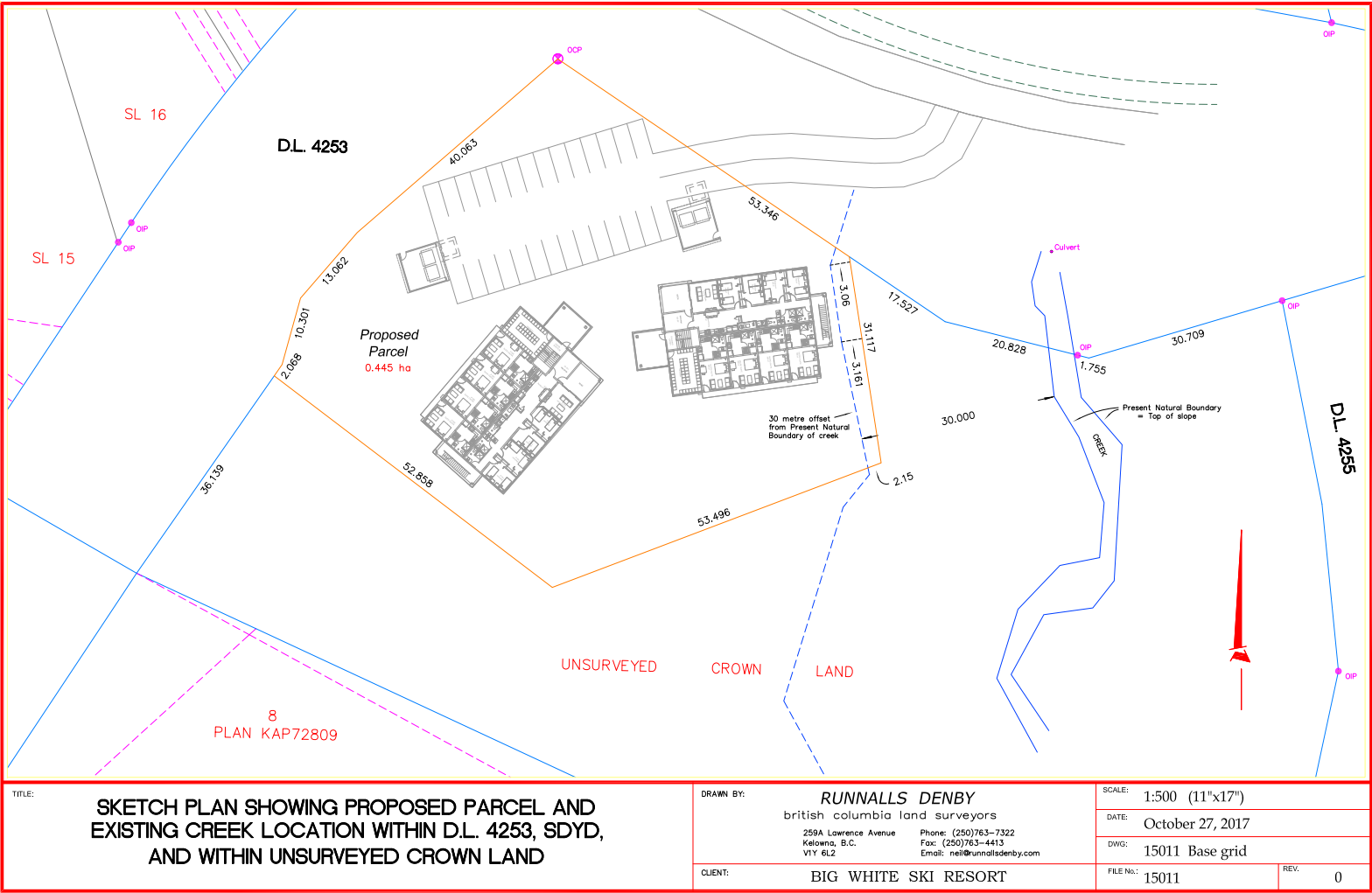


Figure 4. Proposed Parcel - Preliminary Plan

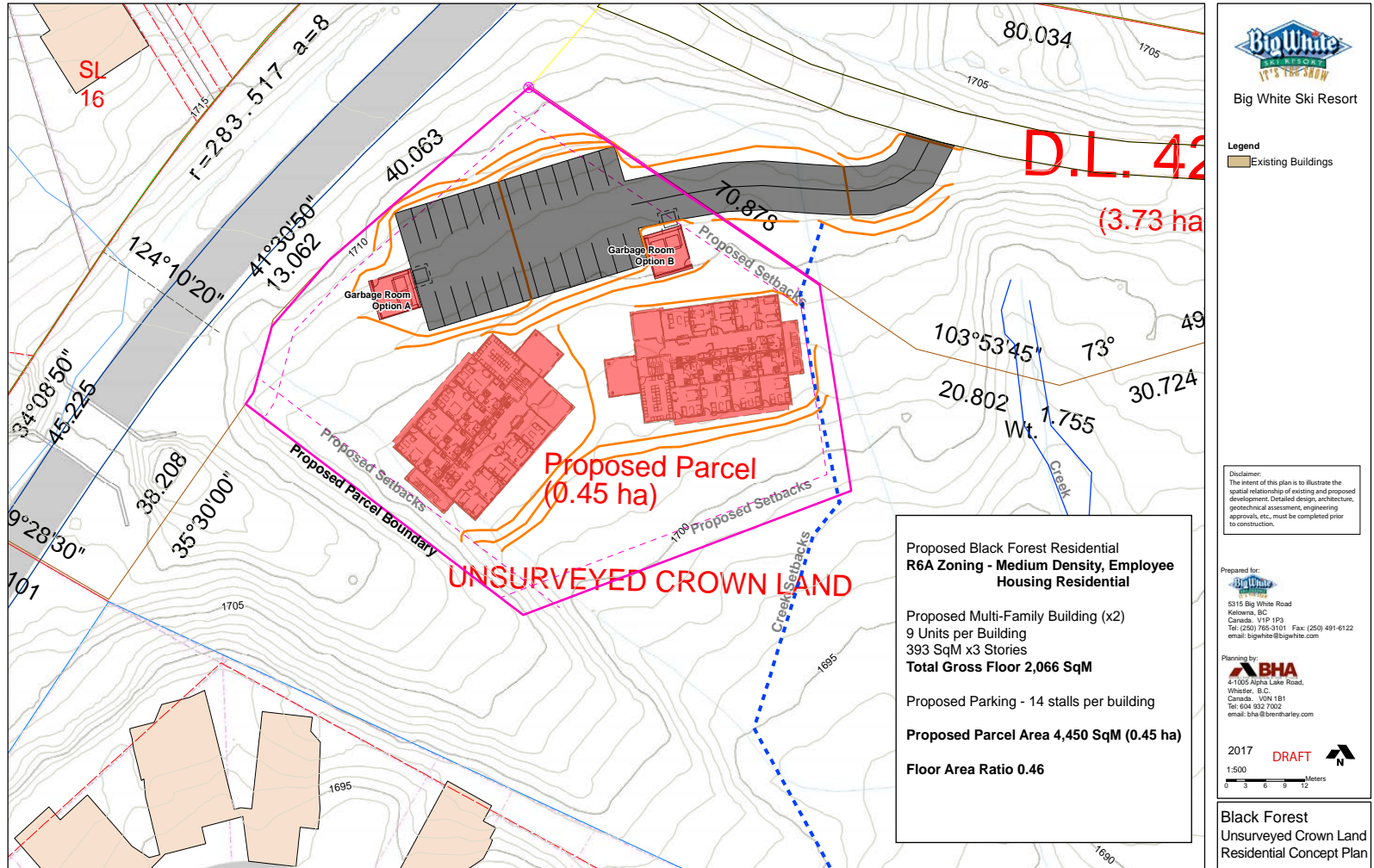


Figure 5. Site Access

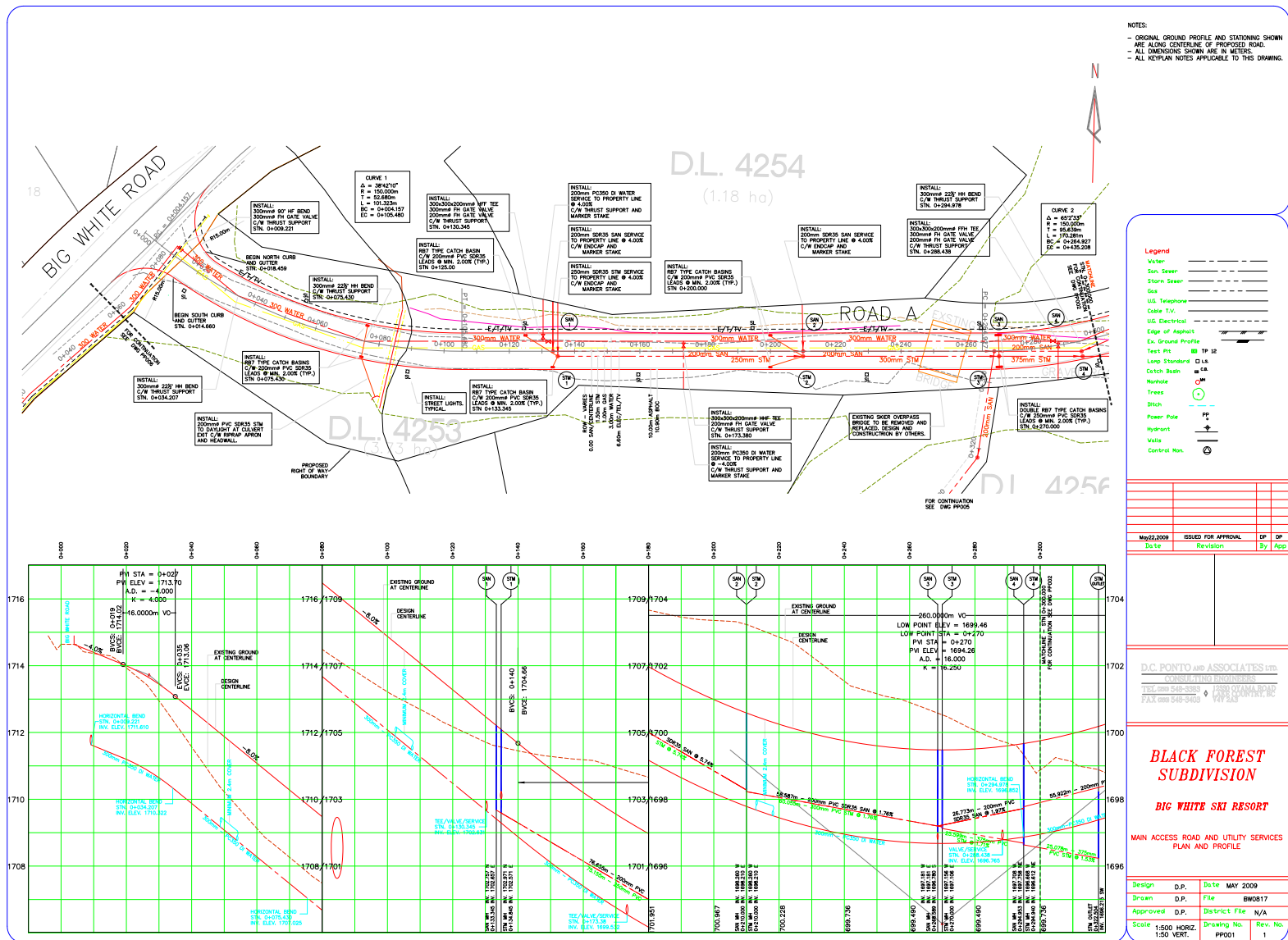
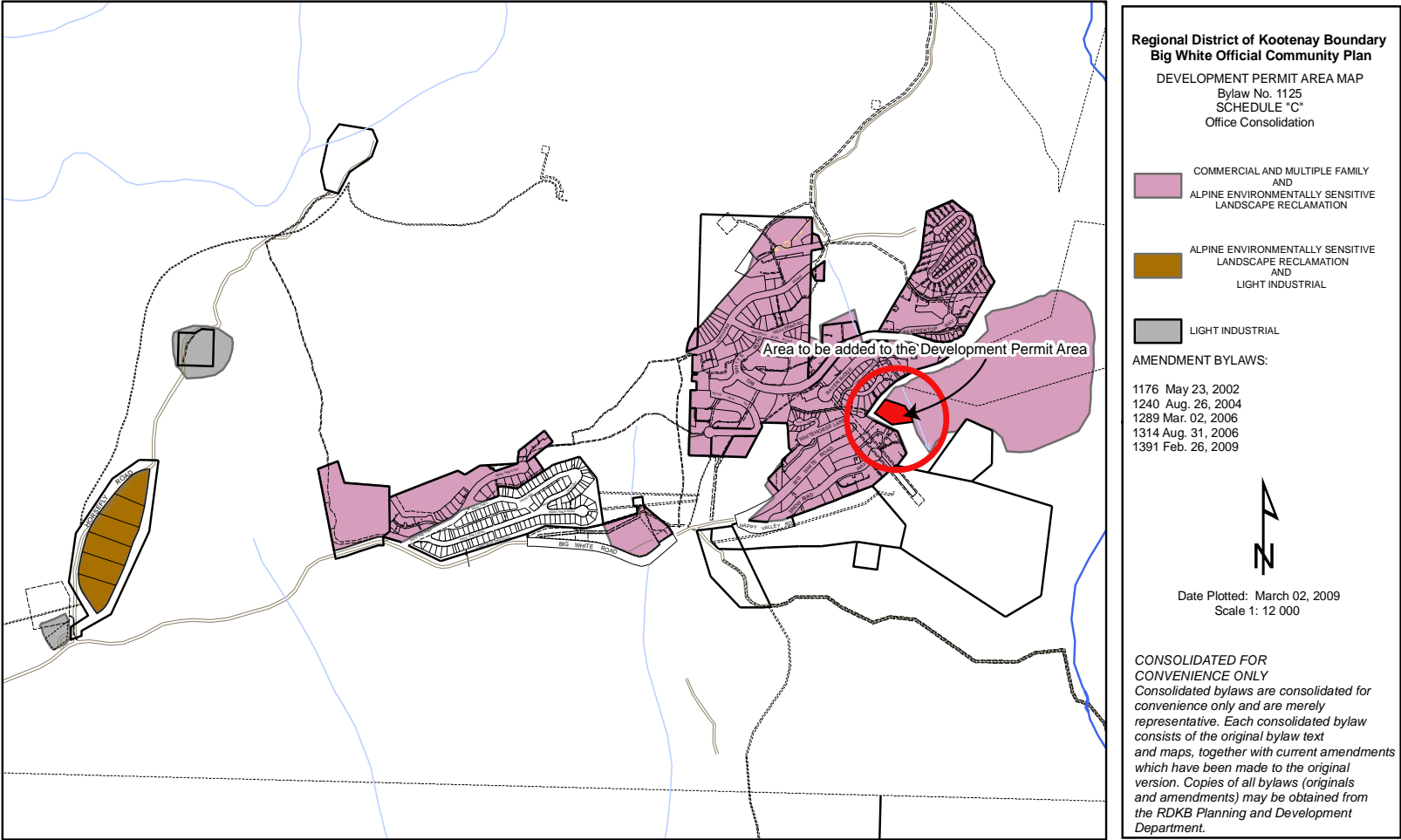


Figure 6. Development Permit Area Map - Area to be added



Black Forest at Big White SECONDARY PLAN

April 2018

Prepared for:



Big White Ski Resort Ltd.
5315 Big White Road
Kelowna, BC
V1P 1P3
250-491-6233
pplocktis@bigwhite.com
www.bigwhite.com

Planning by:



Brent Harley and Associates Inc. (BHA)
4 – 1005 Alpha Lake Road
Whistler, BC
V0N 1B1
604-932-7002
bha@brentharley.com
www.brentharley.com



April 2018

Mr. Ken Gobeil
Regional District of Kootenay Boundary
202 - 843 Rossland Ave.
Trail, B.C.
V1R 4S8

RE: The Black Forest Secondary Plan

Dear Ken:

Please accept the attached Black Forest Secondary Plan as an application for Official Community Plan (OCP) amendment and rezoning.

It is our opinion that the rezoning of these lands is consistent with the community goals identified in the Big White OCP, such that:

- Big White's compact settlement pattern will be maintained;
- Encourage various residential alternatives and affordable housing for employees;
- The ski terrain and topography are respected;
- A range of housing opportunities at Big White be encouraged;
- Residential land is available at Big White to address the various market demands.

And by the following OCP Policy:

Policy 3.11.10

"The Regional District encourages affordable rental housing and such as hostels and employee housing outside the village core by way of rezoning."

Further, the proposed OCP amendment and rezoning will provide Big White with additional residential accommodation tied to the ski trail and lift network and some much needed employee housing.

Please feel free to give us a call should you have any questions.

Respectfully submitted,

Brent Harley, B.E.S., B.L.A., M.B.A, M.C.S.L.A
President
Brent Harley and Associates Inc. (BHA)

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1. Introduction

1.1 Purpose of the Secondary Plan

On behalf of Big White Ski Resort Ltd, Brent Harley and Associates Inc. (BHA) has prepared the following Secondary Plan for Black Forest at Big White. The Secondary Plan provides direction for the Zoning and Official Community Plan amendments for the Black Forest area. This report provides background on Big White's development goals within the context of the potential to develop the Black Forest area as an extension of the resort community. This is followed by an overview of the land's development potential and a description of the proposed development program. The development program illustrates the development concept and proposed zoning designation as well as discussing the potential impacts and benefits of the expansion.

1.2 Secondary Plan Goals and Objectives

As defined by Big White, the primary goal of this Secondary Plan is to:

Guide the rezoning and redevelopment of the Black Forest Area in a fashion that will further the Vision of Big White as a high-quality, destination mountain resort.

In support of this, the Secondary Plan specifically provides:

- The conceptual development and phasing plans for the identified future growth area;
- The proposed density for the entire Black Forest Area, including the land use areas for residential, recreational and servicing;
- Development direction for the rezoning of the Black Forest Area; and
- The basis for an Official Community Plan amendment to permit the expansion into an identified future growth area.

2. Background

2.1 Development Goals and Objectives

The fundamental and ongoing development goal of Big White is to establish itself as a high-quality, destination mountain resort. As a part of the Resort's evolution and commitment to that goal, the development strategy for the Black Forest is to establish this area as an integral component of a safe, functional, and attractive alpine community. The intent is to further diversify Big White into a four-season community with varied residential products and recreational amenities. In accordance with the policies of the Big White Official Community Plan the proposed development program has considered:

- Cost-effective development that respects ski terrain and topography;
- Additional residential development that supports the established Village Centre commercial area;
- Include various residential alternatives and affordable housing for employees;
- Coordinating land development and servicing needs with the existing infrastructure and residential expansion;



- Promotion and fulfillment of natural environmental values;
- Respecting the existing ski trail network and expanding on it;
- Supporting alternatives to automobile traffic where feasible, including mechanized people movers, ski trails, bicycle and walking paths; and
- Providing safe and efficient movement of vehicles, while meeting on-site, resort wide, day skier guest parking requirements;
- Providing appropriate and supportive commercial developments in proximity to the day use parking and Black Forest Express.

2.2 Location and Existing Conditions

The Black Forest area is located south and east of the Black Forest Express and Parking lot and on the south (downhill) side of the most eastern portion of Big White Road (see Figure 2-1). The land is gently sloping with grades between 10 and 20 percent. Consequently, the Black Forest is one of the most developable areas at Big White.

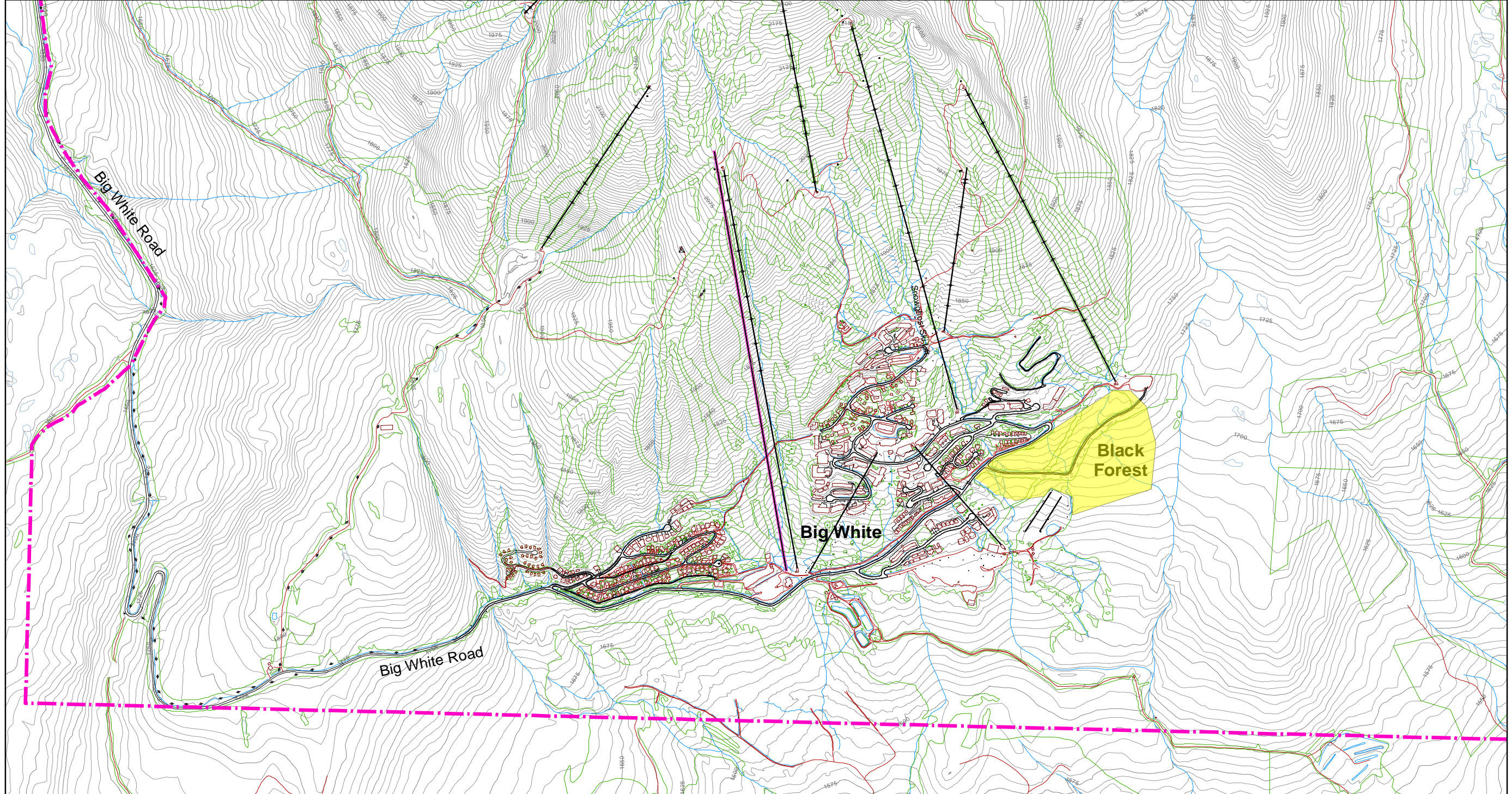
Currently, there is limited development in the Black Forest area. An existing ski trail crosses the site, and a skier overpass across the parking access road allows skiers to easily egress from the base of the Black Forest Express back to the Happy Valley Lift with no conflict from automobile traffic. The main vehicular access to the site is from Big White Road on an existing gravel road that accesses the Black Forest Parking Lot. There are three watercourses that run through the site. The site is vegetated with balsam, lodgepole pine, Engelmann spruce, and sub-alpine fir (See Section 3.4 Environmental Resources).

The entire Black Forest area is contained and contemplated within the approved 1999 Master Plan for Big White. A Crown Grant offer to purchase these lands by way of Crown Grant and the CASP policy, has been received and accepted. The Crown has expressed support for the project and a letter authorizing the secondary planning process on their behalf has been included in Appendix B.

2.3 Existing Ownership, Rights and Zoning

The following are key development considerations that must be taken into account in the future growth of the Black Forest Area lands:

- The Black Forest Area is identified in the Official Community Plan as a Future Growth Area;
- The area lies entirely on Crown Lands;
- A Crown Grant Offer to purchase these lands from the Crown has been received and accepted;
- The entire Black Forest lands are currently zoned as a Recreational Resource; and,
- The Black Forest lands are contained and contemplated within the approved 1999 Master Plan for Big White.



Big White
SKI RESORT
KELOWNA, B.C., CANADA
Black Forest
Context Plan

Produced by:
BHA
4-1005 Alpha Lake Rd
Whistler, BC
Canada V0N 1B1
Phone: 604 932 7002
Fax: 604 938 1161
email: bha@brentharley.com

Prepared for:
Big White Ski Resort Ltd.
PO Box 2039, Stn R
Kelowna, BC
Canada
Phone: 250 765 3101
Fax: 250 765 8200
bigwhite@silk.net

Legend
- - - CRA Boundary
Black Forest

Figure 2-1

January 2018
1:15,000
0 150 300 450 600 750 Meters



3. Development Potential

3.1 Introduction

To determine the development potential for the Black Forest area, the lands were analyzed according to their:

- Relationship to the ski trail and lift network;
- Relationship to existing developments;
- Slope gradients;
- Servicing requirements;
- Visual impacts; and
- Environmental resources.

The inventory and analysis findings assist in the creation of development concepts that are visually desirable, economically balanced, and environmentally sensitive to the site. They also enable the generation of plans that are well integrated with the existing and proposed facilities, considering the issues of well-coordinated access; resort guest requirements/expectations, and; vehicular, pedestrian, and skier patterns throughout the resort. This analysis has considered slope, parking, staging focus, environmental features, visitor and resident experience together with the development program realities and opportunities.

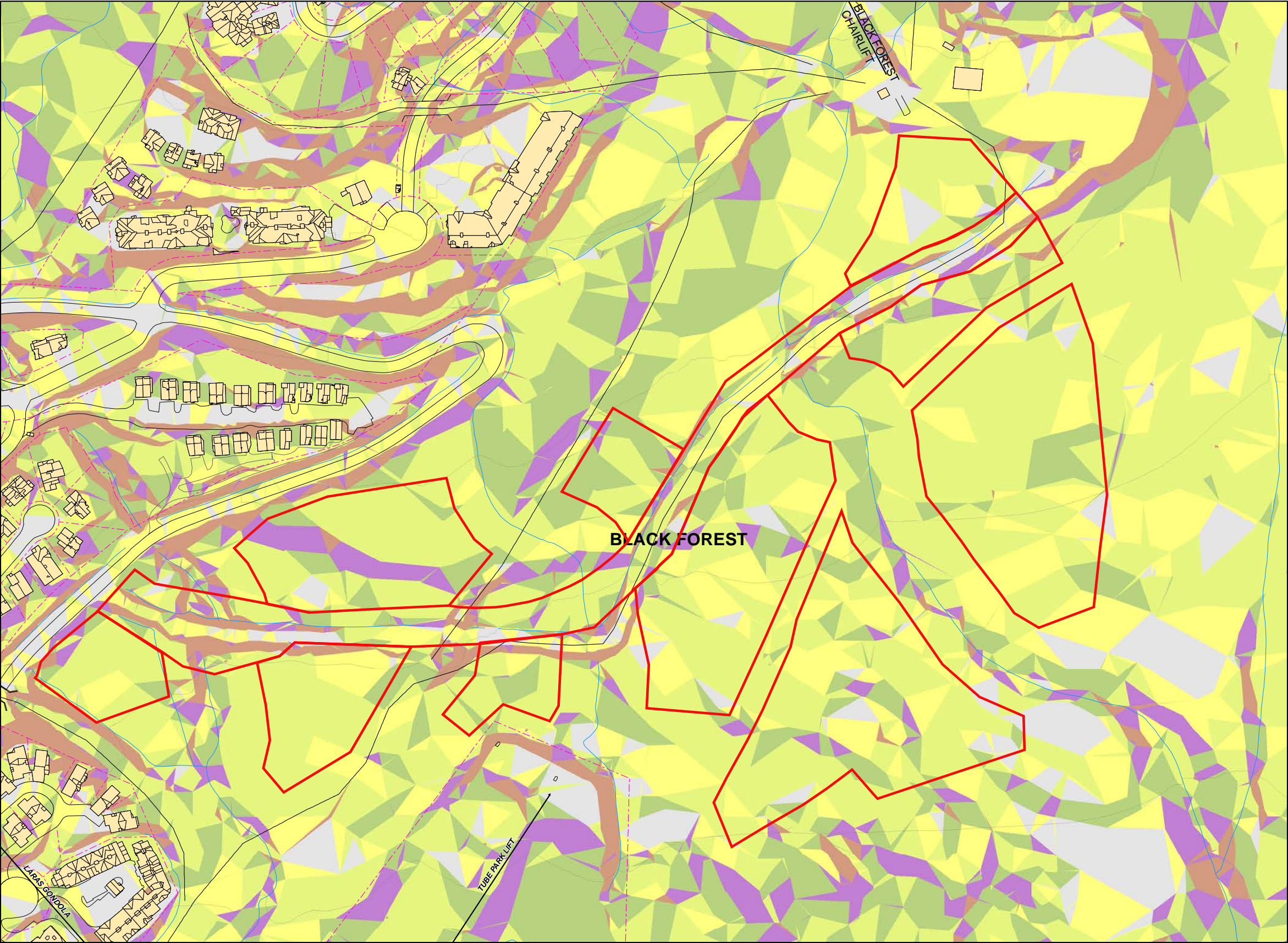
3.2 Slope Analysis

The Slope Analysis (Figure 3-1) is designed to identify the range of slope gradients suitable for potential land use developments. The topographic information has been colour coded into slope gradient categories as follows:

Table 3-1. Black Forest Slope Analysis Criteria

Colour	Slope	Description
White	0- 5%	Ideal for base area village, and residential development. Capable of accommodating all types of base area development
Yellow	0 - 10%	Capable of accommodating all types of base area development with limited grading. Typically identifying parking potential as well as lands that may be wet and environmentally sensitive to development.
Light Green	10 - 20%	Lands that will require some grading to accommodate development. Upper limits to base area/village development.
Mid Green	20 - 30%	Upper limits to multifamily development with grading.
Blue	30 - 40%	Upper limits to conventional single-family development.
Pink	40%+	Generally too steep for development. However, dependent on reasonable access and geotechnical considerations, some development possible.

As is readily apparent in the slope analysis, there is a significant amount of developable land in the Black Forest Area. The area is dominated by 10-20% slopes and interspersed with flat (0-5%) and steeper (30-40%) sections.



Big White Ski Resort
Black Forest

2018

Legend

- Existing CRA Boundary
 - Existing Ski Lifts
 - Existing Ski Runs
 - 20m Contour
- Slope (degrees)**
- Suitable for All Construction Types
 - Acceptable for High Density
 - Maximum for High Density
 - Acceptable for Low Density
 - Maximum for Low Density
 - Not Suitable

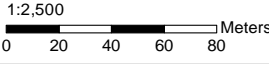
Prepared for:


5315 Big White Road
Kelowna, BC
Canada V1P 1P3
Tel: (250) 765-3101 Fax: (250) 491-6122
email: bigwhite@bigwhite.com

Planning by:


4-1005 Alpha Lake Road,
Whistler, B.C.
Canada V0N 1B1
Tel: 604 932 7002
email: bha@brentharley.com

Statement of Limitations:
The information included on this map has been compiled
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consequential damages including, but not limited to, lost
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the information contained on this map.



Black Forest
Base Slope Analysis

Figure 3-1



3.3 Parking and Circulation Evaluation

The Black Forest conceptual plans considered the parking and circulation issues of vehicles and guests by factoring in the existing circulation patterns, land use, and facilities. The following are key facts pertaining to an evaluation of parking capacities and circulation issues at Big White.

- The proposed development of the Black Forest area will include market and employee housing;
- Market properties will be primarily designed for recreation-oriented families and couples, and will allow ski to/ski from trail access;
- In addition to the existing ski trail, two more ski trails are planned to cross through the Black Forest area;
- These three ski trails will provide ski to/ski from access to the entire development; and
- The day use parking area at the Black Forest lift base is unaffected by this secondary plan, ensuring adequate day use parking will remain available.

3.4 Environmental Values

The site sits within the Okanagan Highlands variant of the Engelmann Spruce-Subalpine Fir Biogeoclimatic zone. Trapping Creek drains the entire southern portion of Big White Mountain while three of its tributaries flow through the development area. The integrity of the visible well-treed sites within the Trapping Creek drainage areas will be respected in the overall development concept as well as the site-specific development programs. Riparian buffers have been established with the intent to protect watercourses from the potential impacts of development.

In 1997 GeoAlpine Environmental Consulting Ltd. undertook an environmental review of the Big White Ski Resort, including the Black Forest area. The review found the following characteristics:

- Tree cover includes mainly Engelmann Spruce and Subalpine Fir, at a mean age of 60-95 years;
- The site is gently sloping and undulating; and
- A wildlife corridor passes by the development area on the eastern side along the Trapping Creek drainage.

3.5 Visitor and Resident Experience

The expansion of the resort community into the Black Forest Area will enable Big White to provide employee housing and a diversified accommodation base with recreational amenities. The Black Forest Area further enhances the destination and resort community experience, as it will:

- Offer a spectacular setting for the new accommodation uses without compromising or competing with existing resort developments;
- Contribute recreational amenities to enhance the resort experience;
- Create affordable and desirable employee housing;



- Combine a mix of accommodation types with direct access and egress to the ski trail and lift network;
- Provide additional beds that will further support the economic sustainability of the ski product and existing Village Centre commercial area;
- Limit any increase in automobile trips through the resort, because of the direct year-round trail access from the development;
- Provide staging commercial amenities (café, washrooms, tickets etc.) to day use guests utilizing the Black Forest parking; and
- The expansion area has been planned to utilize an already existing gravel road that both maximizes the circulation opportunities of the site and improves the access to the day use parking lot adjacent to the Black Forest Express.

4. Proposed Development

4.1 Potential Land Use

Big White Resort wishes to expand into the Black Forest Future Growth Area considering the area's development potential, OCP policies, and the goals and objectives of Big White. Should the OCP amendment and rezoning be approved, it will be the developer's responsibility to work with Big White and the Regional District to create a development plan that adheres to the zoning regulations, the design guidelines and the Resort's goals and objectives.

As proposed, residential land use is predominant throughout Black Forest. Some appropriately sized commercial development is contemplated for the parcels in the immediate vicinity of the Black Forest lift. Open space along riparian corridors, and recreation amenities in the form of ski trails will also be located throughout the plan area.

4.2 Development Concept

The primary objective of the Black Forest Secondary Plan is to facilitate the establishment of additional resort residential accommodations to meet Big White's need for employee housing and supply the market demand. Development will take place while maintaining and protecting appropriate environmental, access and visual qualities so important to the visitor experience and success of the resort. The development consists of single family, 'cabin colony' dwellings, multifamily dwellings in the form higher density condominiums, and employee apartments and dorm rooms. These residential offerings are complemented by a ski to /ski from access and egress within a comfortable walking distance to the alpine skiing, and proximity to the village core. In addition, some commercial development will be located in the vicinity of the Black Forest Express.

The Development Concept (see Figure 4-1) proposes an integrated subdivision consisting of approximately 77 single family lots, 24 medium density multi-family units, 109 medium density single and multi-family units, 100 units of higher density multi-family residential, and 66 units of employee housing. All market parcels will be developed as strata subdivisions. The proposed accommodation totals 1,892 bed units.

The main road off Big White Road will remain as a public road, as will the main spur road which will lead to lands beyond.

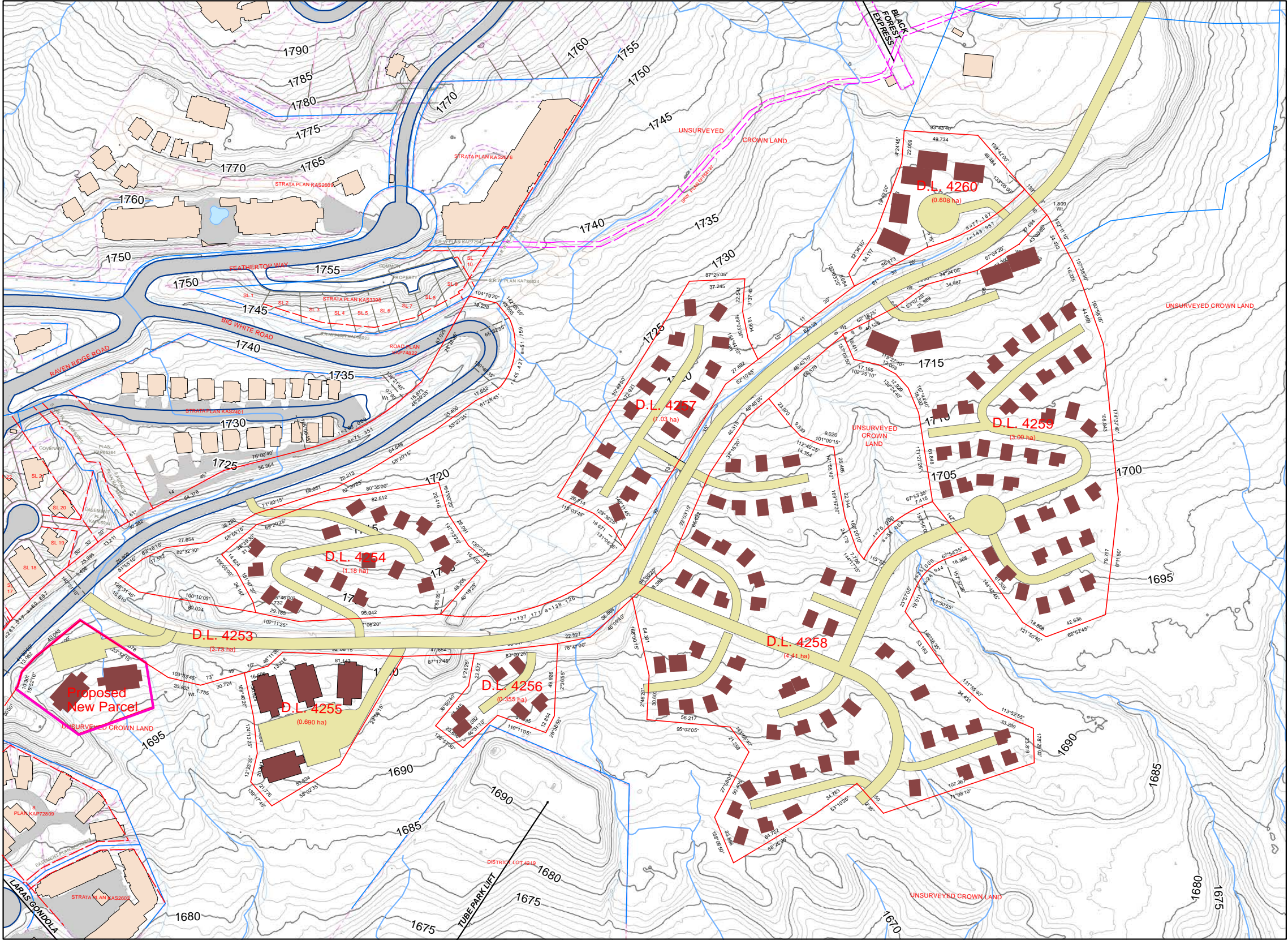


Table 4-1. Development Concept

Parcel #	Area (ha)	Zoning	Unit Type	# of Units	# of Bed Units
DL 4260	0.608	VC6	High Density Multi-family	100	300
DL 4259	3.0	R4 & R3	Medium Density Multi-family and Single-family	109	514
DL 4258	4.41	R3	Single Family	54	324
DL 4256	0.355	R3	Single Family	6	36
DL 4255	0.69	R6A	Employee Housing Residential	36	176
DL 4254	1.18	R3	Medium Density Multi-family	48	352
DL 4257	1.03	R3	Single Family	17	102
DL 4253 Block A	2.43	Unzoned	Road	0	0
DL 4253 REM	1.33	Unzoned	Road	0	0
Unassigned	0.45	R6A*	Employee Housing Residential	18	88
TOTAL	15.453			388	1,892

*Application to amend R6A for Unassigned Land in process

The concept plan also includes dedicated ski access/egress lines that support the objectives of the future growth areas in the OCP. An existing ski trail will be protected through the development and secured by covenant (as shown on the Figure 4-1). Two additional ski trails are incorporated into the layout and will also be protected by covenant. In total, these trails will provide direct access to and egress from the mountain and village via the return ski trails to the Happy Valley and proposed beginner lifts in the area, resulting in a ski to / ski from experience for all residents and guests of the Black Forest at buildout.



Big White Ski Resort

Legend

- Existing Buildings
- Existing Parcel
- Proposed Building
- Proposed Road/Driveway
- Proposed Parcel

Prepared for:
Big White Ski Resort
5315 Big White Road
Kelowna, BC
Canada V1P 1P3
Tel: (250) 765-3101 Fax: (250) 491-6122
email: bigwhite@bigwhite.com

Planning by:
BHA
4-1005 Alpha Lake Road,
Whistler, B.C.
Canada V0N 1B1
Tel: 604 932 7002
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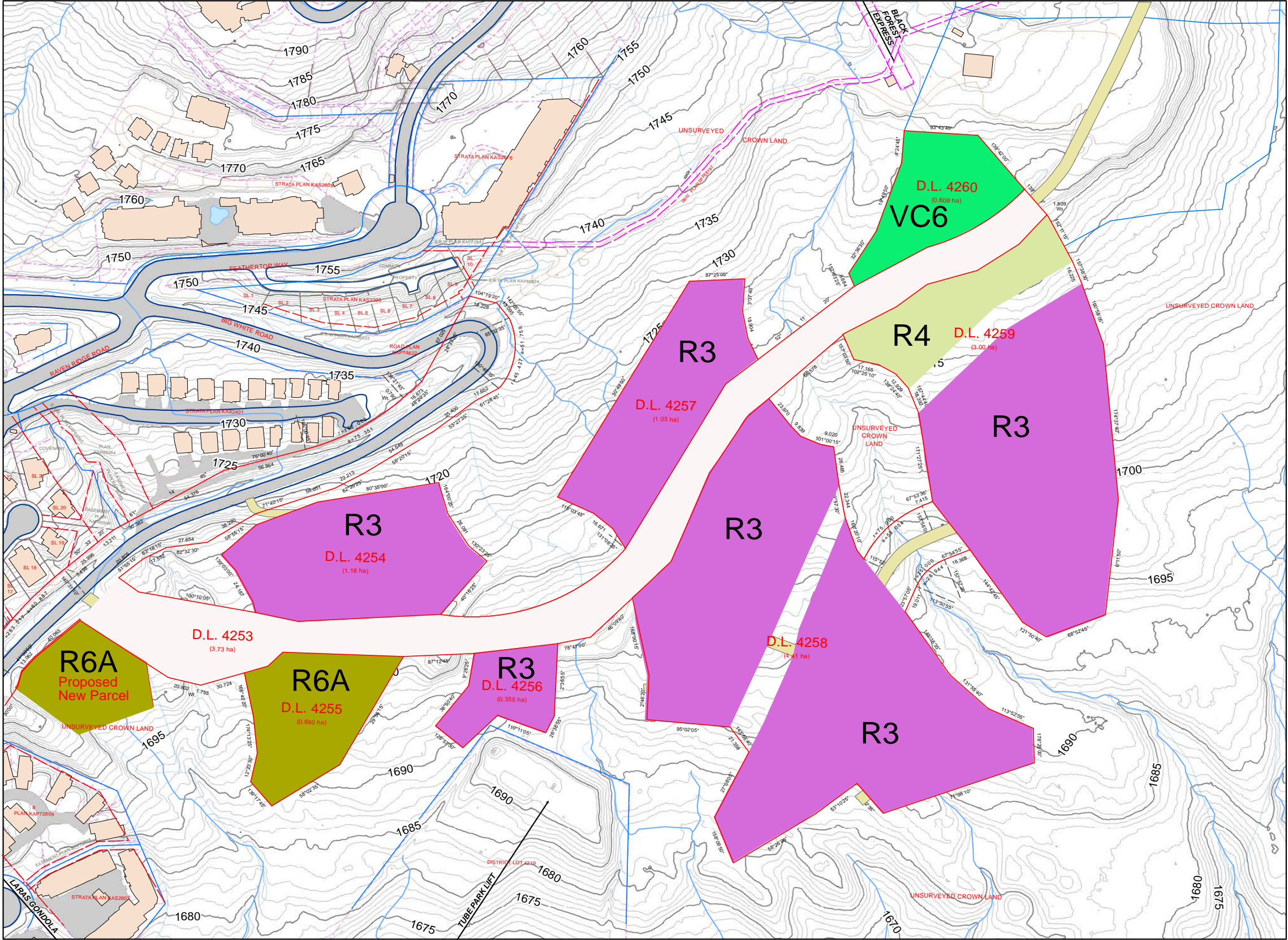


Black Forest
Development
Concept
Figure 4-1



4.3 Proposed Zoning

To fulfill the Development Concept, it is proposed that the single-family parcels be zoned as Chalet Residential 3 Zone (R3), the higher density, multi-family parcels be zoned as Village Commercial (VC6), and employee housing parcels be zoned as Employee Housing Residential (R6A). The development in the R3, VC6, and R6A zones will be in accordance with the Big White Zoning Bylaw No. 1166, 2002.



Big White Ski Resort

Legend

- Chalet Residential R3
- Medium Density Residential R4
- Village Core VC6
- Employee Housing Residential R6A
- Road

Prepared for:



5315 Big White Road
Kelowna, BC
Canada V1P 1P3
Tel: (250) 765-3101 Fax: (250) 491-6122
email: bigwhite@bigwhite.com

Planning by:



4-1005 Alpha Lake Road,
Whistler, B.C.
Canada V0N 1B1
Tel: 604 932 7002
email: bha@brentharley.com

2018

1:2,500
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Black Forest
Proposed Zoning
Parcels

Figure 4-2



4.4 Development Impact

The following discusses the impact of the proposed low, medium, and high density residential uses on the resort.

4.4.1 Adjacent Land Uses

The Black Forest area currently encompasses vacant land, located south of Big White Road and the Black Forest Express and Day Lot Parking area. The development is surrounded by vacant Crown Land on the eastern and southern sides. The tube park facility is adjacent to the development area on the western side. Vegetation buffers between the tube park, as well as the day use parking lot will be promoted through the development permit process.

4.4.2 Access, Circulation and Linkages

There is one primary access point to the Black Forest area via Big White Road located at the northwestern corner of the development. The road (which exists as a gravel access road currently) traverses the parcel west to northeast to the Black Forest day skier parking lot. This road will be a public road providing legal and vehicular access to the development and lands beyond. One other secondary road winds east from the center of the development and south, ending in a hammerhead at the southeast corner of the development. This road will likely be a public road. All tertiary roads will likely be developed as bare land strata roads or private driveways.

The development positively impacts the circulation through Big White by upgrading and paving an existing gravel road that accesses the Black Forest Express and Day Use parking lot. Access to lands beyond will be preserved at the southern portion of the development area.

The development will facilitate the ongoing trail connections for ski to/ski from access. High density uses have been placed in areas with the greatest access to the staging lifts as well as the ski to/ski from and lift network.

4.4.3 Visual Impact Analysis

The location of Black Forest should have limited visual impact on adjacent properties. The downhill sloping site, building and road setbacks, riparian setbacks and maximum building height will significantly reduce the visual impacts to existing and future development in the vicinity of Black Forest.

4.4.4 Resort Parking

The subdivision will provide the appropriate parking in accordance with the Regional District's requirements.

4.4.5 Terrain

The site has a gently sloping terrain with no known hazardous geological features. Any development will respect the environmental integrity of the site. The development plans will be



prepared in accordance with Regional District requirements. A qualified professional engineer will study any site-specific concerns.

4.4.6 Community Image

The proposed development will be subject to the Development Permit process (where designated), ensuring a quality development that is sensitive to the character of Big White as well as the natural environment. It is anticipated that the development will work with the site's natural features to further build upon the Resort's image.

4.5 Objectives and Guidelines for Development Permits

It is proposed that the Black Forest Area be given the land use designations of Medium Density Residential and Village Core.

The Big White OCP requires that a Development Permit be submitted for all hotel, multiple family and commercial buildings. It is proposed that the Black Forest area be included in the Commercial and Multiple Family Development Permit Area as well as the Alpine Environmentally Sensitive Landscape Reclamation Development Permit Area.

The Black Forest area will be subject to the Big White Residential Design Guidelines. The Big White Residential Design Guidelines are intended to assist the developer, architect, and other consultants to understand the quality and image of design expected by Big White Ski Resort. The Guidelines define the range of acceptable site design, landscaping, grading, building design, snow management, and environmental protection considerations within the residential areas at the Resort. Administered by Big White Ski Resort, the Guidelines are utilized for review of all new residential building construction and future renovations.

4.6 Site Servicing

In the summer of 2006, Big White expanded the Powder Basin Reservoir increasing capacity to 207,000m³ at a cost of \$3.9 million. Big White has also received a conditional water license (#118739) on May 20, 2008. With this, the water utility has been designed to service approximately 18,500 bed units as compared to the projected 11,873 bed units.

Big White's sewage treatment plant is currently operating under a permit which allows a daily discharge of 1,350 cubic metres per day. This equates to about 12,400 beds. Big White has applied for a permit to allow a daily discharge of 2,000 cubic metres per day with peaks of 4,000 metres per day. This will accommodate the needs of approximately 18,370 beds. Planning for further expansion will continue as development gradually occurs. A new sewer plant is planned to be developed to the south east of the CRA. It will support the resort development and needs but also accommodate the latest water treatment requirements.

Big White currently has 9,881 bed units in place or committed. The proposed Black Forest development will add approximately 1,892 bed units, bringing the existing or committed total to 11,873. With the proposed increase in the treatment capacity, Big White has sufficient water supply and sewage treatment capacity to accommodate the Black Forest expansion.



4.7 Stormwater and Drainage

Stormwater will be managed by encouraging and mimicking natural processes. Maximizing non-porous and natural ground cover and retaining / reclaiming vegetation where possible will ensure the highest amount of stormwater is infiltrated at the source. Run off will be managed with ditches along roadways to allow maximum infiltration and filtering.

Snow storage areas will be incorporated into roadway design to ensure access is maintained in times of high snowfall. Storage areas will also be associated with roadside ditches that will filter and maximize infiltration of melting snow. Three watercourses running from north to south drain the lands naturally (see Utilities and Servicing Appendix C).



5. Conclusions

The development of the Black Forest area is consistent with the community goals identified in the Big White OCP. The following attributes of the Concept Plan strongly support the proposed development of the Black Forest area for residential and commercial uses with community and recreational amenities:

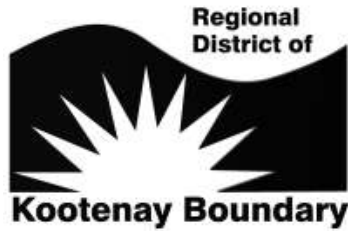
- The Black Forest Lands have a series of significant development attributes:
 - The site is gently sloping and easy to develop;
 - The site has no apparent geotechnical hazards;
 - The sewage treatment and water capacity at the resort can accommodate the development.
- The proposed development will provide a mixture of residential products that will diversify the existing real estate offerings at the resort and expand the ski to/ski from network.
- The subdivision design provides an upgrade to the existing access road of the Black Forest Day skier parking lot which will facilitate improvements to circulation in the resort;
- The development program complements existing environmental features.



Appendix A: Development Permit Guidelines

Development Permit Area: Alpine Environmentally Sensitive Landscape Reclamation
Development Permit Area

Development Permit Area: Commercial and Multiple Family Development Permit Area



BIG WHITE
OFFICIAL COMMUNITY PLAN
Bylaw No. 1125

Regional District of Kootenay Boundary
202-843 Rossland Avenue
Trail, BC V1R 4S8
Telephone: 250.368.9148
Toll Free in BC: 800.355.7352
Fax: 250.368.3990

Adopted by
The Regional District of Kootenay Boundary Board of Directors
June 28, 2001

4 DEVELOPMENT PERMIT AREAS

The Development Permit Areas comprising this section contain guidelines for building construction and landscape reclamation. Development proposals for new construction, additions to existing buildings or reconstructions shall require a Development Permit. The Regional District having regard to the guidelines contained within this section will review development proposals. Conditions or restrictions may be imposed on a development. The regulations contained in the implementing Bylaw may be varied in accordance with the guidelines. These mandatory Development Permit Areas are identified on Schedule „C“, which forms part of this plan.

The Regional District may require, by Resolution of the Board, the deposit of a Security in the form of an Irrevocable Letter of Credit or other such security as may be approved by the Board, to be held until the requirements of a permit related to safety or landscape reclamation under this section have been executed, to the Board's satisfaction. Once the requirements are satisfied in full, the security provided under this subsection shall be returned to the permittee.

Should a permittee fail to fulfill the requirements of a Development Permit, the Regional District may undertake and complete the works required by the Development Permit at the cost of the permittee, and may apply the security as payment towards the cost of the work, with any excess to be refunded to the permittee.

4.1 Commercial and Multiple Family Development Permit Area

Area

Identified as Area No. 1 on Schedule „C“ Development Permit Area Map.

Category

Designated pursuant to

- Section 919.1(1f) establishment of objective for the form and character of commercial, industrial or multi-family residential development; and
- Section 919.1(1h) establishment of objectives to promote energy conservation.

Justification

The success and enjoyment of Big White is highly dependent upon an attractive and functional built environment. Attractive buildings suited to Big White's alpine context may enhance property values and help ensure a pleasant aesthetic experience for visitors. Large accumulations of snow, steep slopes and other high alpine building challenges must be considered in the design of buildings to ensure optimal safety and practicality. The siting and design of buildings directly influence the quality of the built environment.

Application

Development Permits for this development permit area will only be required for the construction of new multiple family residential developments and commercial buildings, and for additions which exceed 100 m² in finished floor area.

Subdivision, site preparation work, and road construction shall be exempt from this section.

A Development Permit issued under this section shall not relax a parking regulation or increase a maximum floor area ratio restriction.

Development Permit applications under this section must address each of the guidelines in writing. A site plan should be accompanied by other relevant visual materials such as building plans as part of an application. An application should clearly convey where proposed buildings will be situated and their relationship to other buildings, services and amenities in the vicinity.

The Development Permit process may vary certain regulations contained in the implementing bylaw. The following factors may be taken into consideration in reviewing a variance request:

Note: This Bylaw is amended periodically.

Contact the Planning Department to ensure this is a current copy.

Big White Official Community Plan-Bylaw No. 1125, 2001

The proposed variance is consistent with the guidelines of this section;

The proposed variance is shown to enhance the proposal;

The proposed variance does not increase the Floor Area Ratio (FAR) beyond the allowable limit established by the implementing bylaw;

Bylaw
No.1277

Height of setback variances exceeding 1 metre will not be approved through the development permit process. Proposals to vary height or setback requirements by greater than 1 metre may be considered as part of a **Development Variance Permit** application.

The proposed variance is necessary due to an unavoidable physical constraint;

The proposed variance does not adversely impact an adjacent property.

This section cannot vary a parking regulation in the implementing bylaw.

GUIDELINES**(1) Buildings shall have practical access and loading areas taking the following factors into consideration:**

- Practical access and egress must be provided for passenger vehicles;
- Appropriate fire-truck and other emergency vehicle access must be ensured. The Big White Fire department may be asked to comment on applications;
- Multi-family buildings with ten or more units and commercial buildings are required to accommodate and to allow for servicing of waste disposal and recycling bins. Applicants are asked to incorporate these standards for waste disposal and recycling:

One waste bin and three recycling containers are suggested for every ten self-contained residential units, or twenty hotel rooms, up to a maximum of four waste bins per building. For exclusively commercial uses, the waste disposal and recycling requirements will be determined at the time of application. The Regional District's Waste Management Coordinator may be asked to comment on applications;

- Proposed hotels must show a sufficient loading area for buses and enhanced ingress and egress to accommodate buses. Applicants are encouraged to consult with the Ministry of Transportation and Highways before applying for a development permit;
- Details of outdoor parking and manoeuvring areas must be provided including gradient analysis and the proposed means for ensuring adequate traction, if required.

Bylaw No.
1182

(2) A drainage management plan *prepared by a professional engineer* shall be provided. The plan must address how surface water will be directed through the site and where it will be directed off the site. Drainage across land must be controlled in a manner, which does not increase discharge off the land, or alter the drainage pattern in a manner which negatively impacts other land.

Bylaw
No.
1353

(3) A snow management plan shall be provided taking the following factors into consideration:

- Roof design must establish effective snow management;
- The plan must describe snow management measures to maintain safe vehicle and pedestrian access to buildings;
- All pedestrian and vehicle access points must be protected from snow shedding and ice accumulation;
- Ski ways and pedestrian pathways shall also be away from potential roof avalanche areas;
- The plan must also identify snow storage areas on the property and/or clearly describe how and where excess snow is to be removed;

Note: This Bylaw is amended periodically.

Contact the Planning Department to ensure this is a current copy.

Big White Official Community Plan-Bylaw No. 1125, 2001Bylaw
No.
1353

- A Professional Architect or Engineer must assure the Regional District in writing that people and property are protected in a reasonable manner from the risk of snow shedding.

(4) Proposed buildings should be designed to withstand the harsh alpine climate at Big White while incorporating the following features:**1.0 General Building Form**

Building facades should appear as a composition of several segments or masses rather than a large, homogeneous entity. Buildings should not dominate the landscape or overpower the pedestrian scale.

- Building facades and roof lines should be articulated to break up the massing of developments;
- Use of porches, courtyards and entry features that define ground levels of buildings, provide visual interest and define human scale are encouraged;
- Balconies should be simply designed; the use of long vertical or horizontal bands of balcony space is discouraged;
- Balconies should be covered and/or protected from snow and ice buildup.
- Encourage building design features that take advantage of solar energy for heating in winter.

Bylaw
No. 1508**2.0 Roof Form**

Roofs should be simple and designed to provide effective snow management. The intent is protection of pedestrians and property.

- Roofs having a sloped appearance should be utilized and the mass of a single large roof should be broken into a collection of roofs and/or masses;
- Where feasible, it is encouraged that the principle ridge line be oriented to the street or major public open space;
- Roof overhangs should be provided;
- Adequate roof ventilation is key to the „cold roof“ concept. Convective ventilation consisting of continuous vents at the eaves and exhaust vents at gable ends or the ridge line is preferred;
- Use of ornaments such as finials, scroll work on ridges and/or decorative turrets are discouraged;
- Roof top access stairs, elevator shafts and mechanical equipment should be designed to be contained within the roof and/or screened from important sight lines.

Bylaw
No.
1353**3.0 *Exterior Finish**

- Materials that reinforce the rustic and rural context of Big White will be used. Materials should be selected based on their durability, weathering potential, compatibility with the surrounding landscape and historic use within a traditional mountain resort;
- Big White's extreme freeze/thaw cycle and frequent large accumulations of snow must be considered in the selection of materials;
- Proposed buildings must be consistent with the mountain setting with appropriate designs and cladding such as stone, wood, acrylic stucco and treated/textured concrete;
- Stained or painted wood siding is strongly recommended;
- Use of heavy natural log or timber beams and posts are encouraged;

***Note: This Bylaw is amended periodically.
Contact the Planning Department to ensure this is a current copy.***

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Big White Official Community Plan-Bylaw No. 1125, 2001

- Use of corner boards, brackets, knee braces, exposed steel fasteners and substantial trim boards is encouraged;
- Use of stone covering the lower portions of buildings is encouraged;
- A limit of three materials per building is recommended in order to reduce visual disorder;
- Materials at the ground floor level should be chosen for their durability and detailed in a manner which respects the pedestrian scale;
- Large windows, which maximize the percentage of glass allowable for every elevation of the building, are encouraged;
- Door openings should be protected from the wind, and overhanging or drifting snow.

(5) Skier access to and from buildings shall be maintained wherever possible.

(6) Development on slopes exceeding 30% shall require a Geotechnical Engineer's report.

- The report must assure the Regional District that slope stability will be maintained;
- Recommendations of the report may be incorporated as conditions of the development permit;

(7) House Numbers shall be displayed and clearly visible at all times.

(8) The guidelines of the Alpine Environmentally Sensitive Landscape Reclamation Development Permit Area shall apply to this development permit area.

4.2 Alpine Environmentally Sensitive Landscape Reclamation Development Permit Area

Area

Identified as Area No. 2 on Schedule „C“ Development Permit Area Map.

Category

Designated pursuant to

- Section 919.1(1a) protection of the natural environment, its ecosystems and biological diversity; and
- Section 919.1(1i) establishment of objectives to promote water conservation.

Justification

Big White ski resort is situated at a high elevation of between 1700 and 1900 m above sea level. The natural vegetation at this elevation is extremely sensitive and easily disrupted by construction and other human activities. The failure to reclaim disturbed areas will leave the landscape in a barren state. This could result in erosion, localized flooding, general unsightliness and scarring of the natural landscape. Reclamation of areas disturbed by construction or other human activity will help minimize the impact of new development on this sensitive ecosystem.

Application

All development in the area designated as Alpine Environmentally Sensitive Landscape Reclamation shall be subject to this section.

Site preparation work and road construction shall be exempt from this section.

***Note: This Bylaw is amended periodically.
Contact the Planning Department to ensure this is a current copy.***

Big White Official Community Plan-Bylaw No. 1125, 2001

Building repairs and other construction activities limited to buildings and not involving the land shall be exempt from this section.

Subdivisions of land shall be exempt from this section.

An application under this section shall be filed prior to the issuance of a Building Permit. The details of the landscape reclamation plan may be submitted at any time during construction but before a Certificate of Final Occupancy is issued. The Board of Directors must approve the Landscape Reclamation Plan before it may be implemented. In the event the landscaping cannot be completed in the same year of construction, the Regional District may accept a security in the form of an Irrevocable Letter of Credit to not obstruct the issuance of a Certificate of Final Occupancy. The Regional District expects the Landscape Reclamation Plan to be implemented no later than one year after a Certificate of Final Occupancy has been issued.

GUIDELINES

- (1) All disturbed areas must be reclaimed. A landscape reclamation report shall describe the manner in which disturbed areas will be reclaimed. The retention of natural vegetation is strongly encouraged wherever possible. Landscape reclamation may include the replanting of natural vegetation. Areas with hard surfacing such as an asphalt driveway or sidewalk are to be shown on the plan.
- (2) The Regional District may take into consideration standards established by the British Columbia Society of Landscape Architects (BCSLA) and the British Columbia Nursery Trades Association (BCNTA).
- (3) Construction debris shall be removed.
- (4) The landscape reclamation plan should consider the threat of wildfire. The plan could indicate the fire-resistance of vegetation and/or suggest other measures to mitigate the threat of wildfire.
- (5) The landscape reclamation plan should consider snow clearing and storage to ensure vegetation is not destroyed by these activities.
- (6) Landscaping and screening elements, if proposed, should provide visual privacy and separation to neighbouring properties and enhance the appearance of proposed buildings as viewed from public roads, the Village Core, and adjacent residential properties.
- (7) Existing vegetation shall be preserved wherever possible and all surface parking, garbage and recycling areas should be screened from view. The vegetation planted should be able to withstand the harsh alpine climate and be co-ordinated with adjacent landscaping.
- (8) Encourage the use of vegetation that does not require irrigation with the exception of watering at planting to establish root development.

Bylaw
No. 1508

4.3 Light Industrial Development Permit Area**Area**

Identified as Area No. 3 on Schedule „C“ Development Permit Area Map.

Category

Designated pursuant to

- o Section 919.1(1f) establishment of objective for the form and character of commercial, industrial or multi-family residential development; and
- o Section 919.1(1i) establishment of objectives to promote water conservation.

Justification

The appearance of the physical and natural environment is important to the continuing success of Big White. High quality visual standards must therefore be maintained for lands dedicated to industrial use.

Note: This Bylaw is amended periodically.

Contact the Planning Department to ensure this is a current copy.

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Big White Official Community Plan-Bylaw No. 1125, 2001**Application**

A Development Permit will only be required for the construction of new buildings or for an addition 200 m² in gross floor area.

Subdivision of land is specifically exempted.

A Development Permit issued under this section shall not relax a parking regulation contained in the implementing bylaw.

GUIDELINES

- (1) A buffer strip comprised of mature trees at least 30m in width shall be maintained around lands designated for industrial exterior storage or a warehousing use.
- (2) Buildings and development within an area designated for an industrial use should be as unobtrusive as possible taking into consideration views from ski slopes including existing and future residential uses.
- (3) Reclamation and landscaping may be required where necessary to reduce or mitigate surface disturbance.
- (4) The guidelines of the Alpine Environmentally Sensitive Landscape Reclamation Development Permit Area shall apply to this development permit area.
- (5) Encourage the use of vegetation that does not require irrigation with the exception of watering at planting to establish root development.

Bylaw
No. 1508

***Note: This Bylaw is amended periodically.
Contact the Planning Department to ensure this is a current copy.***

5 IMPLEMENTATION OF THE PLAN

5.1 Introduction

Following the adoption of this Plan by Bylaw, there are various ways to ensure that the Plan's goals and objectives are achieved. The Plan's implementation shall be the ongoing responsibility of the Regional District, whose actions must conform to the Plan. The co-operation of the Provincial Government, private groups and the public will also be needed. Following are some key mechanisms that will be necessary for implementation.

5.2 General

1. Some of the policies in this Plan involve a coordination of efforts among the Regional District, the Province and private organizations. The Regional District shall encourage the support of these third parties.
2. The Regional District shall ensure as far as possible that the policies of this Plan are properly, fairly and reasonably implemented.
3. The Regional District shall give consideration to the policies of this Plan in preparing short and long term budgetary requirements.

5.3 Land Use Control

1. The Big White Zoning Bylaw shall be redrafted to conform to the policies of this Plan.
2. In order to accommodate specific site conditions or circumstances, the densities and uses referred to in this Plan may be further refined in the implementing bylaws provided that the general intent and purpose of the Plan is respected.
3. Subdivision approval remains with the Ministry of Transportation and Highways Provincial Approving Officer who may have regard to the policies of this Plan in considering subdivision applications.
4. The Regional District, in order to implement this Plan, may enact such bylaws as it considers reasonable and appropriate.

6 LAND USE MAP

6.1 Interpretation of Land Use Maps

The Land Use Map attached hereto as Schedule „B” indicates the general locations and distributions of major land use designations in the Plan area. The boundaries of the designations are approximate and convey the relationship between principal uses. These boundaries will be defined in greater detail in the implementing bylaws.

Public utility uses and transmission facilities (excepting offices, maintenance facilities and administrative services) which are essential for the provision of water, sewer, electricity, telephone and similar services shall be permitted throughout the area as required.

6.2 Explanation of the Land Use Designations

The list below generally indicates the range of permitted uses for each land-use designation.

1. EXISTING DEVELOPMENT AREA

Village Core

Within the area designated Village Core, permitted uses may include: bookshops, business, professional and administrative offices, catering services, conference centres and banquet rooms, day-care facility, eating and drinking establishments, gift shops, health salon and fitness centres, hotels, multiple family residences, personal service establishment, recreation and entertainment facilities, ski/sport shop including ski school and ski rental facilities and accessory uses, buildings and structures.

Medium Density Residential

Within the area designated Medium Density Residential, permitted uses may include: single and two family residences, multiple family residences, home occupations, accessory buildings and structures.

Intermediate Density Residential

Within the area designated Intermediate Density Residential, permitted uses may include: single and two family residences; multiple family residences; recreational and entertainment facilities; home occupations; pensions; bed and breakfasts and/or boarding use; and accessory buildings and structures.

High Density Residential

Within the area designated High Density Residential, permitted uses may include: multiple family residences and accessory buildings and structures.

Day Lodge Commercial

Within the areas designated Day Lodge Commercial, permitted uses may include: day-care facilities, eating and drinking establishments, gift and sport shop, ski school sales and ski rental facilities, ticket sales and accessory uses, buildings and structures.

Public and Institutional

Within the areas designated as Public and Institutional, permitted uses may include: civic use, community hall, emergency services building, fire hall, first aid post, hospital, post office, public service use, recycling facilities, public utility use, ski patrol building and one dwelling unit in conjunction with a principal permitted institutional use recycling facilities.

Light Industrial

Within the areas designated as Light Industrial permitted uses may include typical ski-hill maintenance facilities, storage, towing compounds, accessory uses buildings and structures.

Bylaw
No.
1353

**Note: This Bylaw is amended periodically.
Contact the Planning Department to ensure this is a current copy.**

Big White Official Community Plan-Bylaw No. 1125, 2001

Sewer Utility

In the area designated as Sewer Utility, permitted uses shall include: sewage treatment and disposal facilities operating under a permit pursuant to the Waste Management Act and accessory uses, buildings and structures including the storage of propane or similar fuel tanks.

Recreational Resource

In the area designated as Recreational Resource, permitted uses may include: hiking trails, horseback riding trail and stables, outdoor recreational use, picnic site, resource use, ski lift and tow and accessory uses, buildings and structures.

Neighbourhood Commercial

Neighbourhood Commercial is primarily intended to meet the immediate needs of a residential area that is removed from the Village proper. It should not be of a size or nature that could seriously compete with, or detract from, commercial within the Village Core. The suggested maximum Floor Area Ratio for new development of commercial should be in the vicinity of 0.8.

2. FUTURE GROWTH AREA

The Future Growth Area designation is subject to Secondary Planning in compliance with Section 3.3 of this Plan and all other policies of the Big White Official Community Plan. The permitted uses within the Future Growth Area will be identified by way of the Secondary Planning Process. The Future Growth Area will be divided into sub-areas on Schedule B (Land Use Map) to assist in referencing certain areas with greater ease. The sub-areas are the Black Forest, Village, Lower Snow Pines, Powder and Westridge Future Growth Area.

***Note: This Bylaw is amended periodically.
Contact the Planning Department to ensure this is a current copy.***



Appendix B: Letter of Support from the Province of B.C.



File No: 3413235

March 08, 2018

Donna Dean

Manager of Planning and Development
 Kootenay-Boundary Regional District
 202 - 843 Rossland Ave.
 Trail, BC V1R 4S8

Dear Ms. Dean,

Re: Application for Rezoning, Black Forest Project at Big White Ski Resort

Brent Harley and Associates Inc., acting as an agent on behalf of Big White Ski Resort, have applied to our office for a Crown Grant within the Black forest development area of Big White Ski Resort. The Crown Grant application is for the development of employee housing. We understand the application area does not currently have suitable zoning for the intended purpose.

This letter will confirm that Brent Harley and Associates Inc., is authorized to act as agent on behalf of the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) with respect to a rezoning application, over the area as shown in red on the attached map and described as:

**All the Unsurveyed Crown land adjacent to District Lot 4253, Similkameen Division
 Yale District, containing 0.448 hectares, more or less, within the Controlled
 Recreation Area for Big White Ski Resort.**

I trust that this letter is sufficient to allow the Board to accept and process the application required for this development. Please feel free to call or email me if you require further information, 250-371-3934 or Lily.Kotzeva@gov.bc.ca.

Sincerely,

Lily Kotzeva
 Land Officer

pc. Brent Harley and Associates Inc. Via Email: brent@brentharley.com
 Paul Plocktis, Vice President, Real Estate & Development, Big White ski Resort
 Via Email: pplocktis@bigwhite.com

Ministry of Forests, Lands and
 Natural Resource Operations

Mountain Resorts Branch

Mailing Address:
 510 – 175 2nd Avenue
 Kamloops, BC V2C 5W1

Telephone: 250 371-3952
 Facsimile: 250 371-3942
 Website: www.gov.bc.ca/for

Big White Ski Resort Employee Housing

- File: 3413235 - 0.448 hectares +/-
- Big White Ski Resort Controlled Recreation Area
- All Survey Parcels
- Surveyed Rights of Way
- Ecological Reserves
- Mapsheet Grid - 20K

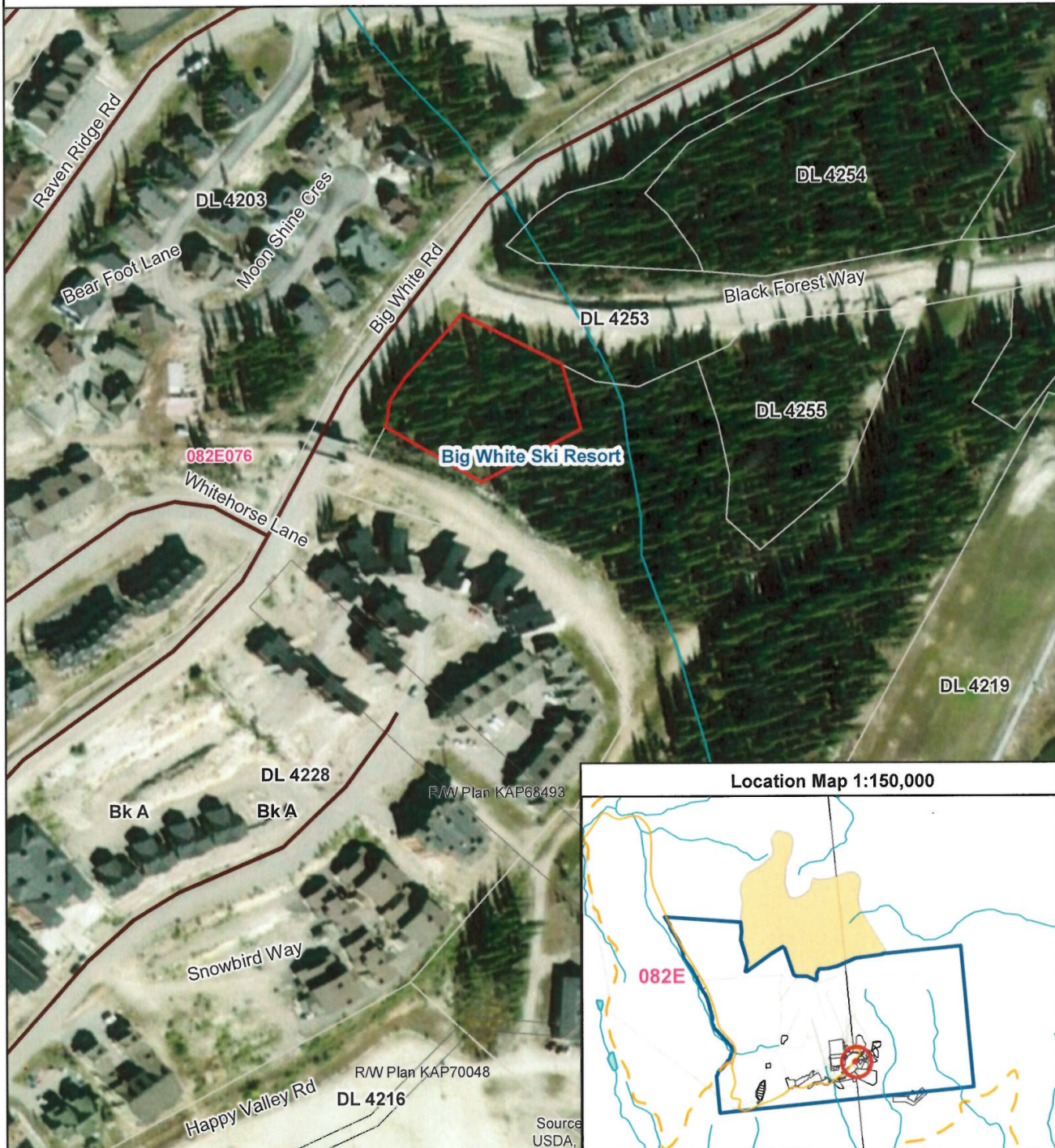
Date: February 9, 2018

Scale: 1:2,500

BC Albers, NAD83

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Appendix C: Utilities and Servicing Plan



April 5, 2018

Big White Ski Resort Ltd.
PO Box 2434, Station R
Kelowna, BC
V1X 4K5

Attention: Mr. Jeremy Hopkinson
Vice President, Mountain Operations

Dear Jeremy:

**RE: Black Forest Development - Secondary Plan
Drainage System Plan**

1.0 INTRODUCTION

This letter-report sets out our recommendations for the development of a storm drainage system for the Black Forest development area at Big White. The objective of this letter is to determine the storm sewer layout and pipe diameters required to service the proposed development

This report includes the following sections:

- 1.0 Introduction
- 2.0 Engineering Criteria
- 3.0 Drainage Analysis
- 4.0 Summary of Report

The proposed Black Forest development is to consist of 10 land parcels that will house 388 housing units which will contain 1892 bed units. The development elevation ranges from 1,683m to 1,717m and is located immediately south and below Big White Road just past the skier bridge.

The location of proposed development area is shown on Figure 1.1 on the following page. Table 1.1 accompanies Figure 1.1 and lists the development units, area, and number of bed units proposed per parcel.

The roads and site layout are based on development layout supplied by Brent Harley & Associates. Road design within the proposed development is preliminary, although the routes proposed appear feasible and the drainage is based on existing topography.

Agua Consulting Inc. “Engineered Water Solutions”

- o 3660 Anderson Road, Kelowna, BC, V1X 7V8
- o Phone / Cell: 250.212.3266

Big White Ski Resort
Black Forest Secondary Plan
Drainage System Plan
April 5, 2018

Page 2

Figure 1.1 - Black Forest Plan (Source: Brent Harley and Associates- Secondary Plan)

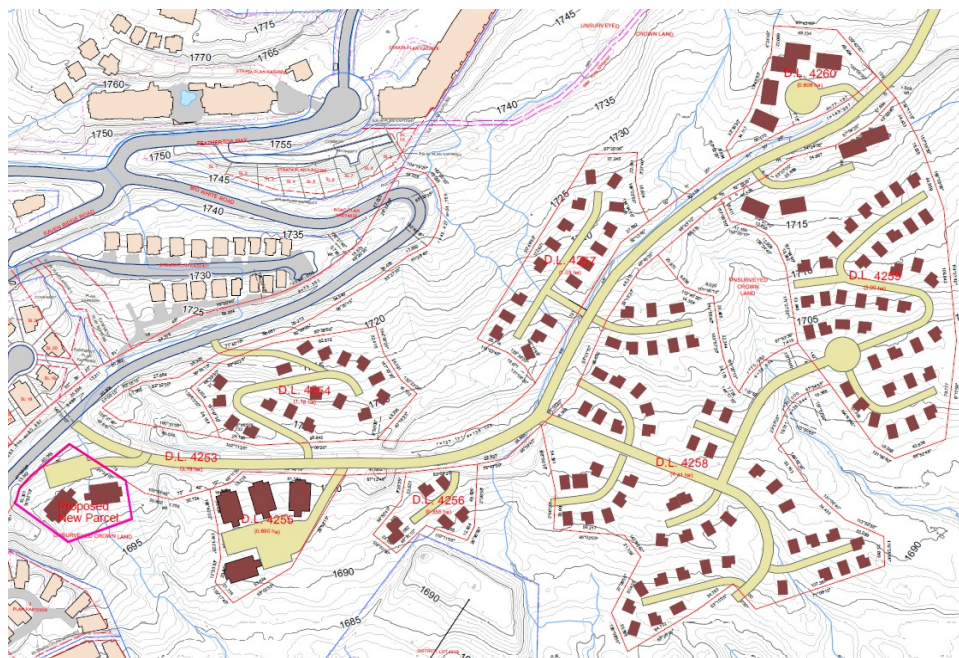


Table 1.1 - Development Parcels - (Source Brent Harley and Associates – Secondary Plan Table 4.1)

Parcel #	Area (ha)	Zoning	Unit Type	# of Units	# of Bed Units
DL 4260	0.608	VC6	High Density Multi-family	100	300
DL 4259	3.0	R4 & R3	Medium Density Multi-family and Single-family	109	514
DL 4258	4.41	R3	Single Family	54	324
DL 4256	0.355	R3	Single Family	6	36
DL 4255	0.69	R6A	Employee Housing Residential	36	176
DL 4254	1.18	R3	Medium Density Multi-family	48	352
DL 4257	1.03	R3	Single Family	17	102
DL 4253 Block A	2.43	Unzoned	Road	0	0
DL 4253 REM	1.33	Unzoned	Road	0	0
Unassigned	0.45	R6A*	Employee Housing Residential	18	88
TOTAL	15.453			388	1,892

*Application to amend R6A for Unassigned Land in process

Agua Consulting Inc.
“Engineered Water Solutions”

2.0 DESIGN CRITERIA

Criteria for storm water infrastructure design are based on good engineering practices. A summary of the parameters used is as follows:

Minor return period storm frequency	1:5 year
Major return period storm frequency	1:100 year
Manning's Coefficient	n=0.013

The proposed development was divided into contributing areas as illustrated in Figure 3.1. All contributing areas are small enough to complete the runoff analysis using the Rational Method. Runoff coefficients were used based on the proposed density for each area. Runoff coefficients used are as follows:

Runoff coefficient for Single Family Units	0.5
Runoff coefficient for Attached Multi-family	0.7
Runoff coefficient for Detached Multi-family	0.6
Runoff coefficient for road and parking areas	0.8

Rainstorms Data

Rainfall data for the Big White area is no available. Information from the Kelowna International Airport with a correction factor due to altitude difference was used for the Drainage Analysis. Precipitation intensity was increased by 30%.

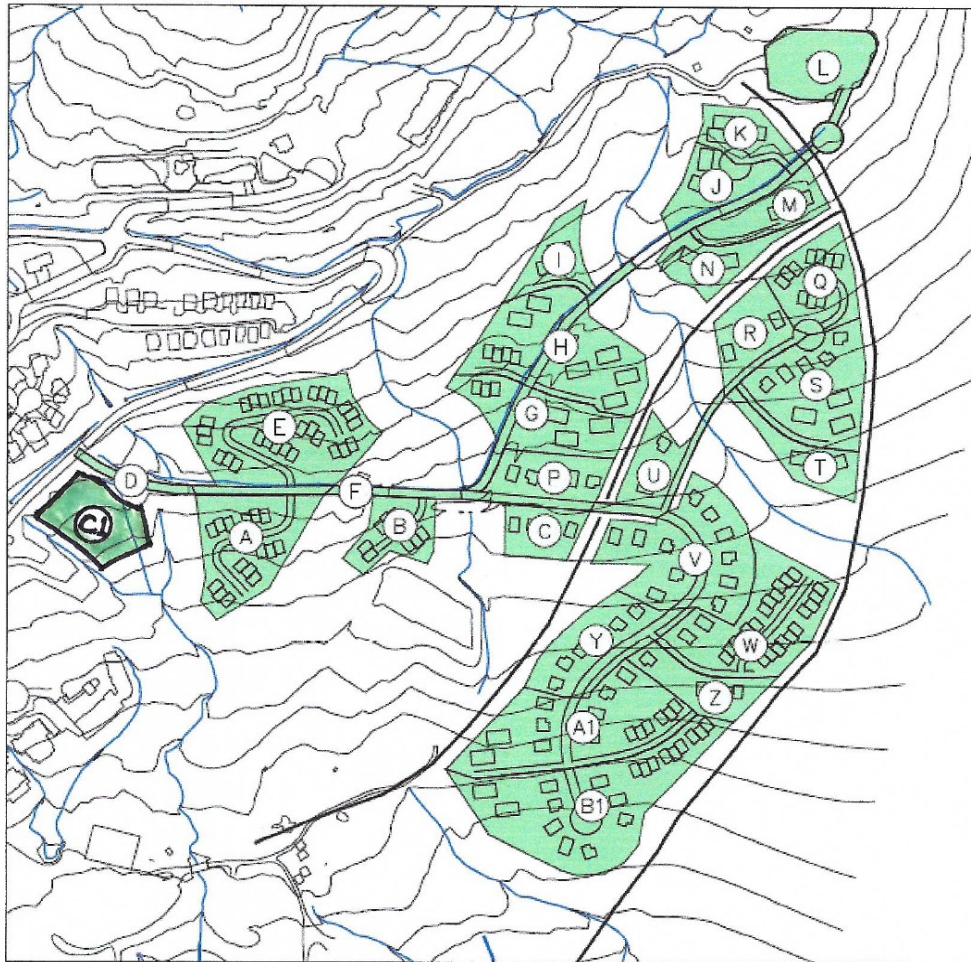
Time of Concentration

Time of concentration for the 5-year event	10 min
Time of concentration for the 100-year event	5 min

3.0 DRAINAGE ANALYSIS

The proposed development is located east of the Big White Village on land sloping to the southeast. Several minor water courses flow through the proposed development area. Runoff flows conveyed by the storm sewer will be discharged at these water bodies at several locations. Figure 3.1 shows the sub-catchment areas identified for the Black Forest development.

Figure 3.1 - Black Forest Sub-catchment Area Identification



Big White Ski Resort
Black Forest Secondary Plan
Drainage System Plan
April 5, 2018

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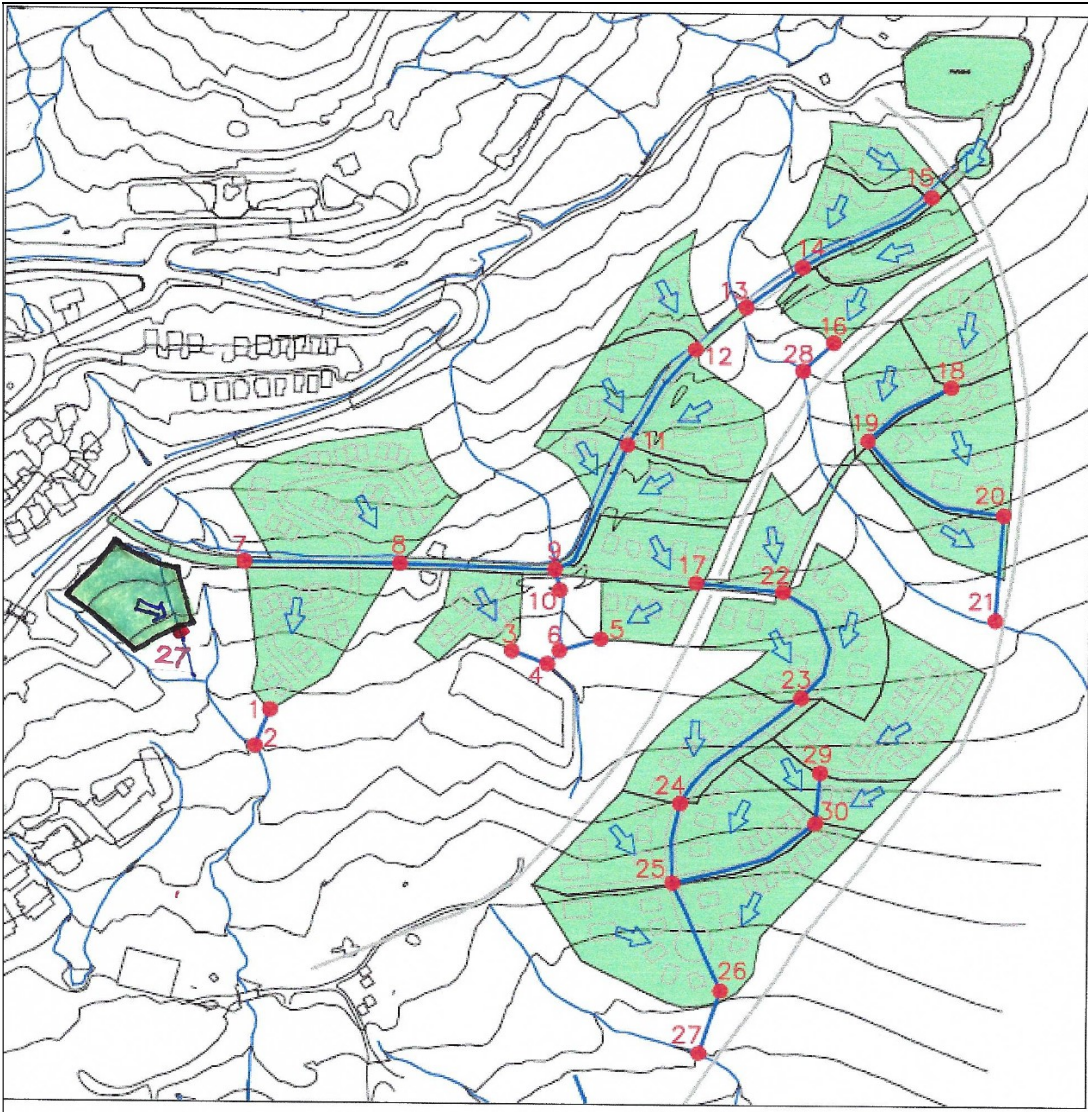
Table 3.1 - Black Forest Sub-Catchment Areas and 1:5 year Runoff

AREA ID	AREA (m ²)	Runoff Coeff	Discharge Node No.	Runoff Flow (L/s)
A	7898	0.7	1	92
B	3663	0.7	3	43
C	300	0.5	5	25
D	884	0.8	7	12
E	12725	0.7	8	160
F	924	0.8	9	12
G	7289	0.65	9	79
H	11583	0.6	11	116
I	3555	0.6	12	36
J	4798	0.6	14	48
K	3345	0.6	15	33
L	6222	0.8	15	83
M	3847	0.6	14	38
N	3328	0.6	16	33
P	4922	0.5	17	41
Q	5346	0.7	18	62
R	4187	0.5	19	35
S	8854	0.55	20	81
T	3359	0.6	21	34
U	4144	0.5	22	35
V	11203	0.5	23	93
W	9967	0.65	29	108
Y	6621	0.5	24	55
Z	3684	0.6	30	37
A1	12333	0.55	25	113
B1	15024	0.55	26	150
C1	4500	0.6	27	45

The proposed storm sewer is illustrated in Figure 3.2. Estimated runoff flows from a minor 1:5-year storm event are listed above in Table 3.1. The storm sewer pipe network is based on the proposed road alignment and the existing topography.

Agua Consulting Inc.
"Engineered Water Solutions"

Figure 3.2 - Black Forest Proposed Storm Sewer



The proposed storm sewer pipe network has been designed to convey the runoff generated by the 5 year storm event. The required pipe diameters and expected flows are listed in Table 3.2

Runoff generated by the 1:100-year storm event will be safely conveyed by roads and swales following the same drainage pattern shown in Figure 3.2. The expected runoff flows from each of the sub-catchment areas is indicated in Table 3.3

Table 3.2 - Storm Sewer Pipe Network

Node ID		Elevation (m)		Length	Slope	Diameter	Manning	Pipe Cap.	Max Flow	Q / Qfull	Comments
Initial	Final	Initial	Final	(m)	(%)	(mm)	(n)	Full (L/s)	(L/s)	(%)	
1	2	1686.5	1685	30	5.00%	250	0.013	133	80	60.2%	Discharge to Creek
3	4	1687	1685	30	6.67%	250	0.013	153.5515871	37	24.1%	Discharge to Creek
5	6	1688.5	1685	44	7.95%	250	0.013	167.7287935	22	13.1%	Discharge to Creek
7	8	1703.5	1700.5	135	2.22%	250	0.013	88.65305013	10	11.3%	
8	9	1700.5	1694.5	105	5.71%	300	0.013	231.1697113	149	64.5%	
12	11	1716.5	1707.5	96	9.38%	250	0.013	182.0897825	31	17.0%	
11	9	1707.5	1694.5	121	10.74%	250	0.013	194.930111	131	67.2%	
9	10	1694.5	1693	18	8.33%	375	0.013	506.1579536	280	55.3%	Discharge to Creek
15	14	1726.5	1721	102	5.39%	250	0.013	138.0960314	101	73.1%	
14	13	1721	1718	73	4.11%	300	0.013	196.0420125	176	89.8%	Discharge to Creek
16	28	1713.5	1710	30	11.67%	250	0.013	203.1296564	29	14.3%	Discharge to Creek
18	19	1705.5	1701	76	5.92%	250	0.013	144.7102853	54	37.3%	
19	20	1701	1693.5	128	5.86%	250	0.013	143.9546129	84	58.4%	
20	21	1693.5	1686	85	8.82%	300	0.013	287.2573328	184	64.1%	Discharge to Creek
29	30	1676	1668.5	48	15.63%	250	0.013	235.0768984	94	40.0%	
30	25	1668.5	1664	113	3.98%	250	0.013	118.6771134	94	79.2%	
17	22	1693	1692	60	1.67%	250	0.013	76.77579353	36	46.9%	
22	23	1692	1687	60	8.33%	250	0.013	171.6758934	65	37.9%	
23	24	1687	1673.5	165	8.18%	250	0.013	170.1080441	113	66.4%	
24	26	1673.5	1664	68	13.97%	300	0.013	361.4575505	211	58.4%	
25	26	1664	1653.3	110	9.73%	375	0.013	546.8550599	305	55.8%	
26	27	1653.5	1650	55	6.36%	375	0.013	442.3126559	435	98.3%	Discharge to Creek
27	Creek	1705	1699	45	13.33%	250	0.013	217.154737	45	20.7%	Discharge to Creek

Big White Ski Resort
 Black Forest Secondary Plan
 Drainage System Plan
 April 5, 2018

Table 3.3 - Black Forest Sub-Catchment Areas and 1:100year Runoff

AREA ID	AREA (m ²)	Runoff Coeff	Discharge Node No.	1:100 Runoff Flow (L/s)
A	7898	0.7	1	238
B	3663	0.7	3	110
C	300	0.5	5	65
D	884	0.8	7	30
E	12725	0.7	8	413
F	924	0.8	9	32
G	7289	0.65	9	204
H	11583	0.6	11	299
I	3555	0.6	12	92
J	4798	0.6	14	124
K	3345	0.6	15	86
L	6222	0.8	15	214
M	3847	0.6	14	99
N	3328	0.6	16	86
P	4922	0.5	17	106
Q	5346	0.7	18	161
R	4187	0.5	19	90
S	8854	0.55	20	209
T	3359	0.6	21	87
U	4144	0.5	22	89
V	11203	0.5	23	241
W	9967	0.65	29	278
Y	6621	0.5	24	142
Z	3684	0.6	30	95
A1	12333	0.55	25	291
B1	15024	0.55	26	387
C1	4500	0.6	27	116

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4.0 REPORT SUMMARY

This section provides a summary of our report

- ☐ Black Forest development is located in an area that has several available discharge locations into water courses. Having the opportunity to discharge the runoff in several different locations reduces the pipe sizes required throughout the drainage pipe network. It also disperses the runoff flows to the natural water courses with lower flows and less overall impact.
- ☐ The proposed development area has been subdivided into small sub-catchment areas. The analysis was carried out utilizing the Rational Method. Intensity Duration Frequency rainfall data from the Kelowna Airport with a 30% increase factor due snowpack and rainfall intensities expected at the higher altitude.
- ☐ The storm sewer has been designed to generally follow the road layout and is based on the existing topography. The pipes have been sized to convey the 1:5-year storm event.
- ☐ Roadside ditches will convey the higher 1:100-year runoff events.
- ☐ A minimum pipe diameter of 250mm is recommended for this drainage plan.
- ☐ At the time of this report completion no detailed profiles of the roads within the development were available. The drainage plan has been based on existing topographic information. Once the detailed road design is completed, confirmation of the actual pipe slopes and required storm sewer pipe sizes can be completed. The final pipe sizes must be checked against the actual detailed design drawing pipe slopes to verify there is sufficient pipe capacity to carry the minor system Design Flows.
- ☐ Table 3.2 of this report shows the preliminary pipe diameters for the proposed storm sewer.
- ☐ The major storm event runoff will flow overland following the same route as the minor storm event. In places where the overland flow is not conveyed by a road, swales large enough to carry the expected flows shall be constructed. Erosion protection of the swale must be considered during their design.
- ☐ The capacity of the ravine where Nodes 4, 6 and 10 will discharge has to be assessed to make sure that no overland flow will enter the west part of sub-catchment areas A1 and B1.

Yours truly,

Agua Consulting Inc.



Bob Hrasko, P.Eng.
 Principal

RJH

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April 4, 2018

Big White Ski Resort Ltd.
PO Box 2434 Station R
Kelowna, BC
V1X 4K5

Attention: Mr. Jeremy Hopkinson,
Vice President, Mountain Operations

Dear Jeremy:

**RE: Black Forest Development - Secondary Plan
Water Supply System Plan**

1.0 INTRODUCTION

This report sets out our recommended water supply plan for the Black Forest development area at Big White. This letter supersedes the October 29, 2007 letter prepared at that time. Since that time, Big White has developed additional water source capacity at both the Rhonda Lake Water Treatment Plant and at the new Powder Basin Water Treatment Plant. The objective of this letter is to assess the capacity of the existing water system infrastructure to service the proposed development. The size of new infrastructure needed to supply water to the Black Forest Development is presented.

This report includes the following sections:

- 1.0 Introduction
- 2.0 Engineering Criteria
- 3.0 Water System Capacity Assessment
- 4.0 Water System Upgrades
- 5.0 Summary of report

The proposed Black Forest development is to consist of 10 land parcels that will house 388 housing units which will contain 1892 bed units. The development elevation ranges from 1,683m to 1,717m and is located immediately south and below Big White Road just past the skier bridge.

Location of proposed development and site layout is illustrated on Figure 1.1 on the next page.

Included with Figure 1.1 is Table 1.1 which is an excerpt from the Brent Harley Secondary Plan report (*Table 4.1 in their report*) summarizing development units and bed units for the individual parcels.

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- o 3660 Anderson Road, Kelowna, BC, V1X 7V8
- o Phone/Text: 250.212.3266

Big White Ski Resort
Black Forest Secondary Plan
Water Supply System
April 5, 2018

Page 2

Figure 1.1 - Black Forest Plan (Source: Brent Harley and Associates- Secondary Plan)

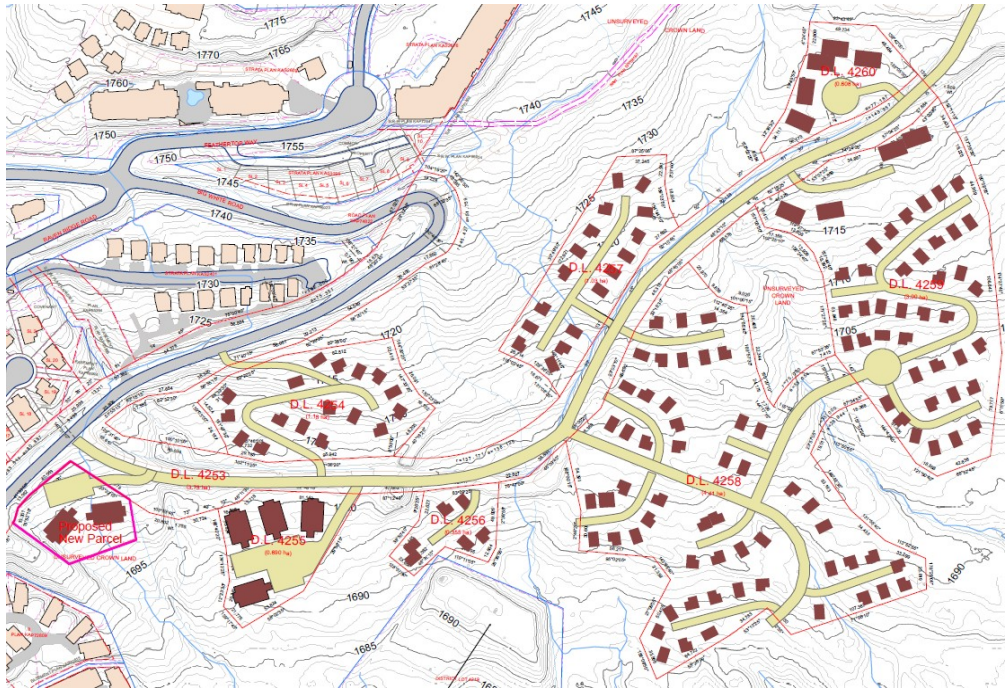


Table 1.1 - Development Parcels - (Source Brent Harley and Associates – Secondary Plan Table 4.1)

Parcel #	Area (ha)	Zoning	Unit Type	# of Units	# of Bed Units
DL 4260	0.608	VC6	High Density Multi-family	100	300
DL 4259	3.0	R4 & R3	Medium Density Multi-family and Single-family	109	514
DL 4258	4.41	R3	Single Family	54	324
DL 4256	0.355	R3	Single Family	6	36
DL 4255	0.69	R6A	Employee Housing Residential	36	176
DL 4254	1.18	R3	Medium Density Multi-family	48	352
DL 4257	1.03	R3	Single Family	17	102
DL 4253 Block A	2.43	Unzoned	Road	0	0
DL 4253 REM	1.33	Unzoned	Road	0	0
Unassigned	0.45	R6A*	Employee Housing Residential	18	88
TOTAL	15.453			388	1,892

*Application to amend R6A for Unassigned Land in process

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2.0 ENGINEERING CRITERIA

Engineering criteria adopted for this report is presented as follows:

Population Density

High Density Building	33 bed/building
Medium Density Building	11 bed/building
Single Family Unit	4 bed/building
Studio	2 pillows
1 Bedroom	4 pillows
2 Bedroom	6 pillows
3 Bedroom	8 pillows
Additional bedroom	1.5 pillows

Water Demands

Average Day Demand (ADD)	68.2 L/d/bed (15 lpgd/bed)
Maximum Day Demand (MDD)	227.3 L/d/bed (50 lpgd/bed)
Peak Hour Demand (PHD) / MDD factor	1.5

Fire Flow Demand (minimum)	150 L/s for 2 hours
----------------------------	---------------------

Residual Pressures

Maximum Static Pressure	95m (135 psi)
Minimum Pressure under Peak Hour Demand	31.7m (45 psi)
Minimum Pressure under MDD + FF	14.1m (20 psi)

Hazen- Williams Roughness Coefficient 'C' for PVC pipe	130
--	-----

3.0 WATER SYSTEM CAPACITY ASSESSMENT

Our assessment of the water system with respect to the proposed development covers domestic water demand, fire demand, reservoir storage capacity, water distribution system capacity, and water treatment plant (WTP) capacity.

WATER DEMANDS

Average daily demand created by this development will result in:

$$1892 \text{ bed units} \times 15 \text{ Igpd / bed unit} = 28,380 \text{ Imperial gallons} \times 365 = 10,358,700 \text{ Imp. Gallons}$$

$$\text{Total Annual Demand increase on Sources} = 46,987 \text{ m}^3 = 47 \text{ ML}$$

Maximum Daily Demand (MDD) is the basis for daily water supply capacity. This is the number used to size source supply components such as water treatment and balancing storage. Based on a MDD of 50 Igpd/bed the additional demand placed on the mountain from the proposed development is estimated to be as follows:

Black Forest

Phase 1 – 946 bed units x 50 Igpd/bed unit	=	47,300 Igpd (2.48 L/s)
Phase 2 – 946 bed units x 50 Igpd/bed unit	=	47,300 Igpd (2.48 L/s)

Ultimate Add'l Max Day Water Demand (MDD)	94,600 Igpd (4.97 L/s)
--	-------------------------------

Peak hour demands are estimated to be 1.5 x the MDD. The PHD is estimated to be 7.5 L/s.

FIRE DEMAND

Fire flow of 150 L/s with a duration of 2 hours is typical for multi-family developments in the BC Southern Interior. At the time of construction planning, each specific building fire flow demand must be estimated as per Fire Underwriters Survey (FUS) to confirm that the building FF demand does not exceed fire flow supply capacity.

RESERVOIR STORAGE ASSESSMENT

Reservoir storage is typically assessed using the equation of the sum of:

- A = Balancing storage, typically 6 hours of the Maximum daily water demand;
- B = Fire storage for the flow rate and duration of the highest level of protection required in the service area;
- C = Emergency storage which is equal to (A + B) x 25%

Existing reservoir storage on the mountain consists of a 1,363 m³ concrete in-ground storage tank with a high-water level of 1879.40 metres. The current actual MDD measured at Big White is 27.53 L/s (524,000 Igpd). The reservoir is gravity fed from the WTP, where the number of on-line filters is adjusted through out the year to supply the MDD. The WTP capacity is 31.5 L/s (600,000 Igpd) which reduces the balancing storage requirement. The development will add 4.97 L/s demand to the MDD requirements.

Since 2007, the Rhonda Lake water treatment capacity has been upgraded such that the flow through the water treatment plant can provide significantly more water due to the installation of two large Spektron 250e UV reactors. This allows the filtration system to be bypassed in times of emergency, while still maintaining disinfection requirements.

Our current assessment of storage allotment is summarized as follows:

Current Storage Assessment	No Bypass	w / bypass
A (Balancing storage) = MDD flow (27.53 L/s) for 6 hours =	595 m ³	595 m³
B (Fire storage) = 150 L/s for a duration of 2.0 hours =	495 m ³	1,080 m³
C (emergency storage) = 25% x (A+B) =	273 m ³	419 m³
TOTAL	1,363 m³	2,094 m³

Current fire storage available can include both the fire storage and emergency storage components. The total amounts of Items B and C amounts 768 m³ or 150 L/s for a duration of 1.42 hours. The fire storage is supplemented by the large UV reactors which make up the difference in required flow and storage. The storage available in Rhonda Lake is in the range of 262,000 m³.

Future Storage Assessment	No Bypass	w / bypass
A (Balancing storage) = MDD flow (32.50 L/s) for 6 hours =	702 m ³	702 m³
B (Fire storage) = 150 L/s for a duration of 2.0 hours =	388 m ³	1,080 m³
C (emergency storage) = 25% x (A+B) =	273 m ³	446 m³
TOTAL	1,363 m³	2,227 m³

The available fire protection flow from the reservoir is reduced to 150 L/s for a duration of 1.22 hours when the Black Forest Development MDD is added to the water system. The supplemental flow from the UV reactors makes up the difference in fire demand under emergency conditions.

WATER DISTRIBUTION SYSTEM CAPACITY

The proposed development is outside the area currently serviced by the Big White water distribution system. The watermain network has to be extended to supply water to Black Forest development. The proposed network expansion is discussed in Section 4.0 Water System upgrades.

WATER TREATMENT CAPACITY ASSESSMENT

The existing Rhonda Lake water treatment system has a current capacity of 31.5 L/s (600,000 lpgd). With the addition of the full Black Forest development, MDD demand will increase by 4.97 L/s to a total MDD of 32.5 L/s. The Rhonda Lake water treatment capacity is insufficient to handle the entire maximum daily demand without bypassing the filters.

In early 2018, Big White developed the Powder Basin water source with a UV disinfection and chlorination facility constructed immediately below the Powder Basin Reservoir. This facility has an initial capacity of 3.46 L/s for two small reactors (three small Hallett UV reactors installed rated at 27.4 USgpm each). This water treatment system will feed into the lower pressure zone and will take demand off of the Rhonda Lake water system during MDD conditions.

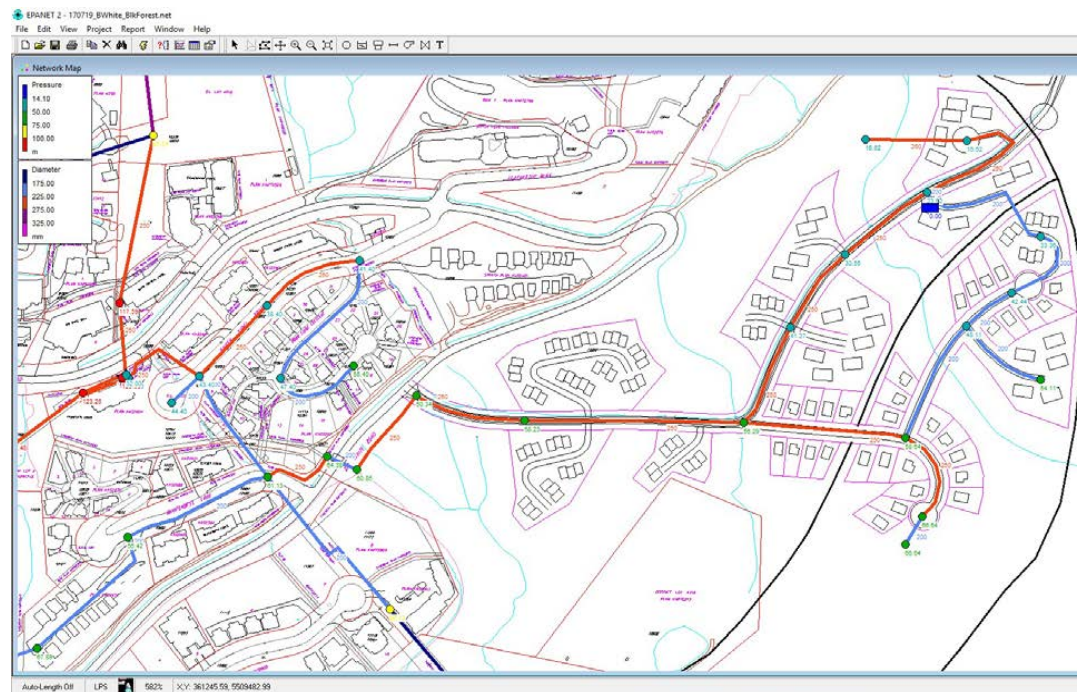
4.0 WATER SYSTEM UPGRADES

The water system upgrades required to service the proposed development are discussed in this section.

Water Distribution System Upgrades

The computer water distribution model is the best analytical tool for determining water distribution system capacity to the development site. The proposed pipe network expansion was added to the latest version of the model to confirm water main diameter requirements for properly servicing the Black Forest Development. Figure 4.1 illustrates the required water main sizes. Sizes are shown on the figure in millimeters. The red pipes are 250mm diameter. The light blue pipes are 200 mm diameter. The loop around the lower (south eastern) portion of the development is recommended to be 200mm diameter as a 150mm diameter loop will result in higher than desired velocities in the event of a 150 L/s fire flow.

Figure 4.1 - Recommended Water Main Sizes



The development area is located below the two existing Pressure Reducing Valve (PRV) stations that are on the mountain. Because the development is lower on the mountain, there is the ability to provide water from either the Rhonda Lake source or from the Powder Basin Reservoir.

Fire Flow Protection

FUS fire flow assessments for the larger building within Black Forest must be completed to determine specific building fire demand. Additional information in regards to square footage, construction materials, fire wall and sprinkler system installation, as well as building clearances will affect the fire flow assessment. For multi-family development within the Okanagan region, a maximum fire flow of 150 L/s is the standard municipal design requirement.

In 2007, two options were considered for providing the design fire flow to the Black Forest area: one was to bypass the pressure media filters at the Rhonda Lake Treatment plant and upgrade the disinfection capabilities; the second was to install water main from the Powder Basin source and bring that source on-line. The first option was successfully implemented in 2015

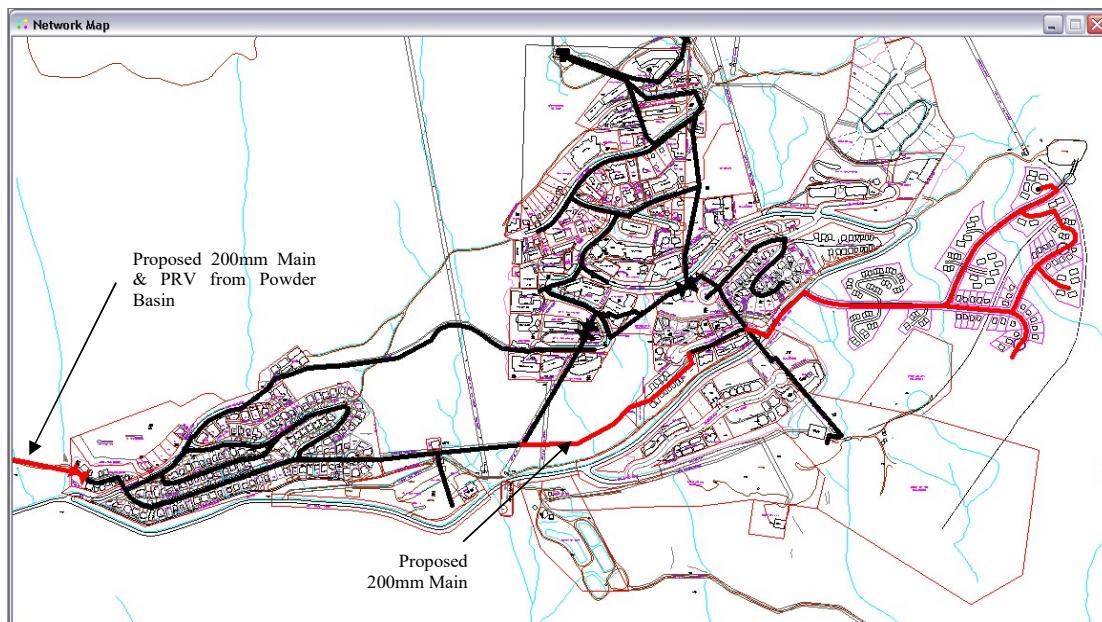
Option 1 - Fire Flow Protection – Bypass Filters

One option is to adjust the system so that the FF component is eliminated from the storage requirement equation by means of a direct feed from the Rhonda Lake Reservoir. Rhonda Lake Reservoir holds approximately 360,000 m³ of storage and is the primary water supply for Big White. Sufficient flow and substantial duration of the maximum flow will be available if this source is used directly to provide fire protection. Since 2007, the disinfection capacity from the Rhonda Lake source has been completed.

Option 2 - Fire Flow Protection – Feed from Powder Basin

The second option considered is to supply water across the lower Pressure zone service area and supply water from the new Powder Basin Reservoir. The treatment facility is partially completed. Figure 4.2 shows the new mains required for Basin Powder to feed the Black Forest area.

Figure 4.2 - Powder Basin Supply to Black Forest



5.0 SUMMARY OF REPORT

This section summarizes our report.

- ☐ Water demands for this development are based on a total of 1,892 bed units at a MDD of 50 Igpd per bed unit. The MDD for the current development is 27.53 L/s. With the addition of Black Forest, the additional demand is estimated to be 4.97 L/s. The total MDD would become 32.5 L/s at development area build-out. The peak hour demand is estimated to be in the range of 7.5 L/s.
- ☐ An Engineer's sealed form of the FUS fire flow assessment should be completed by each developer and submitted to Big White to confirm the fire flow required for each new building developed is able to be provided by the water supply system. This letter has been completed based on a maximum fire flow requirement for multi-family development of 150 L/s. Should the FUS fire flow calculation indicate that a higher fire flow is required the watermain grid for supply must be reviewed.
- ☐ The proposed development can be connected to the existing water distribution system. As shown in Figure 4.1, the water main sizes to meet the domestic flow and fire flow demand is a 250mm supply main. Recommended water main sizes are illustrated in Figure 4.2 of this report.
- ☐ Since the October 2007 report, Big White has improved the disinfection supply capacity at the Rhonda Lake WTP and has brought on-line the Powder Basin WTP disinfection system to provide a new source and better redundancy in water supply during emergencies;
- ☐ The existing 1879m elevation reservoir capacity has been assessed factoring in the gravity fed flows available from the water treatment plant. The water treatment plant operates continually to supply the MDD reducing the balancing storage requirement from the existing reservoir;
- ☐ Big White has the ability to provide a continuous supply of gravity fed, disinfected water from the Rhonda Lake water source. This flow bypasses the filters at the WTP and is not limited in storage capacity with 360,000 m³ of water typically available;
- ☐ The proposed water distribution system with in the Black Forest area has been modeled to confirm that water main diameters are adequate to supply the expected demands under the Engineering Criteria conditions indicated in Section 2.0 of this report.
- ☐ Water distribution system simulation indicated that a fire flow of 150 L/s can be supplied to the Black Forest area if the water main sizes shown in Figure 4.1 are utilized.
- ☐ The Rhonda Lake WTP filtration capacity is limited to 31.5 L/s. The additional development increases the requirement to 32.5 L/s. The shortfall is met by the supply capacity from the Powder Basin WTP which is 3.45 L/s.

Please review this letter and call us with any further questions that you may have.

Yours truly,

Agua Consulting Inc.



Bob Hrasko, P.Eng.
 Principal

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 "Engineered Water Solutions"

Draft Zone: R6B Hostel Zone

407B. HOSTEL ZONE R6B

1. Subject to compliance with the general provisions in Part 3, the following provisions shall apply in the Hostel Zone.

2. Permitted Uses

The following uses only shall be permitted:

- a) Employee Housing;
- b) Employee Services;
- c) Hostel;
- d) Accessory buildings and structures.

3. Minimum Parcel Area

The minimum parcel area shall be 2,000 m².

4. Floor Area Ratio

The maximum floor area ratio shall be 0.8

5. Setbacks

No building or structure or part thereof except a fence shall be located within:

- a) 4.5 metres of a front lot line;
- b) 4 metres of a rear and interior side lot line;
- c) 3 metres of an exterior side lot line.

6. Parcel Coverage

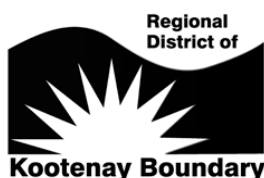
The maximum parcel coverage shall be 60%. Notwithstanding the foregoing, portions of underground parking areas which are not directly under the foot print of a building and which are entirely below the finished grade of the parcel and thereby fully concealed, shall be deemed to be exempt from these parcel coverage standards.

7. Height

- a) Principal buildings shall not exceed 17 metres in height;
- b) Accessory buildings shall not exceed 6 metres of one storey in height.

8. Parking

All Off-street parking spaces shall be provided in accordance with Section 317 of this Bylaw.



ELECTORAL AREA SERVICES (EAS) COMMITTEE STAFF REPORT

Date:	May 11, 2018	File #:	C-317-02535.930
To:	Chair Worley and Members of the Electoral Area Services (EAS) Committee		
From:	Ken Gobeil, Planner		
RE:	Development Variance Permit Application – Strelbisky and Milligan		

ISSUE INTRODUCTION

The RDKB has received an application to reduce the minimum interior side setback and to increase the maximum height for an accessory building on 12 Chase Road, Christina Lake. (see Site Location Map; Subject Property Map; Applicant Submission).

HISTORY / BACKGROUND INFORMATION

Property Information	
Owner(s):	Michael Strelbisky and Darcy Milligan
Location:	12 Chase Road, Christina Lake
Electoral Area:	Electoral Area 'C' / Christina Lake
Legal Description(s):	Parcel F, Plan KAP28028, DL 317, SDYD
Area:	0.19 hectares (0.467 acres)
Current Use(s):	Single Family Dwelling
Land Use Bylaws	
OCP Bylaw No. 1250	Residential
Zoning Bylaw No. 1300	Single Family Residential 1 (R1)
Development Permit Area	NA

The subject property is on Chase Road between the intersection of Westlake Drive and Ness Road. There is currently a manufactured home and shop on the property (see Site Location Map; Subject Property Map).

PROPOSAL

The applicant is proposing to construct a detached garage on the western side of the property. The proposed building is taller, and closer to an interior side property line than permitted in the Zoning Bylaw. The following variances are requested (see *Applicants' Submission*):

- Reduce the interior side yard setback for an accessory building greater than 10m² in area from 3 metres to 1.5 metres – a 1.5-metre variance.
- Increase the maximum height for an accessory building from 4.6 metres to 5.5 metres – a 1.1 metre variance

IMPLICATIONS

In considering applications for Development Variance Permits, the RDKB generally considers whether the proposed variance will:

- a) Resolve a hardship;
- b) Improve the development;
- c) Cause negative impacts to the neighbouring properties.

In response to these, the applicant has provided the following points:

- a) The hardship noted is the restrictive access into the proposed garage. The applicant has noted that the reason for the setback variance is to avoid and not disturb the existing driveway, power poles, or trees on the property. The reason for the height variance is in order to fit larger vehicles in the garage.
- b) This was not addressed by the applicant.
- c) This was not addressed by the applicant.

The applicant has noted that the building plan they have submitted is inaccurate because the garage doors are the same size (see Applicant Submission). One door is supposed to be 8 ft. tall and 10 ft. wide. The other door could be 6 ft. tall and 8 ft. wide. If this is supported, more accurate drawings will need to be prepared for the Development Permit.

Although not identified by the applicant, improvements for a garage include investment into the community, and cleaning up of yards to conceal vehicles and possessions that would otherwise be stored outside.

Surrounding property owners will be notified of the opportunity to comment on the application as part of the notification process. Notifications are mailed after the Electoral Area Services meeting.

ADVISORY PLANNING COMMISSION (APC)

During the May 8, Electoral Area 'C'/Christina Lake APC meeting the application was supported. However, the APC did note that the septic system was not included in the Site Plan submitted by the applicant (see, Applicant Submission).

Page 2 of 3

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PLANNING AND DEVELOPMENT COMMENTS

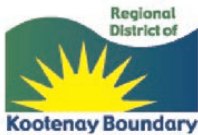
The Planning and Development Department has contacted the applicant to determine the location of the septic system. The applicant noted that the septic system is located on the eastern side of the property in front of the house and shop (See, Applicant Submission). They indicated that a revised site plan will be created that can show the approximate location of the septic system.

RECOMMENDATION

That the Development Variance Permit application submitted by Michael Strelbisky and Darcy Milligan to allow for a reduced interior side yard setback for an accessory building greater than 10m² in area from 3 metres to 1.5 metres – a 1.5-metre variance and an increase to the maximum height for an accessory building from 4.6 metres to 5.5 metres – a 1.1 metre variance, on the property legally described as Parcel F, Plan KAP28028, DL 317, SDYD, Electoral Area 'C'/Christina Lake be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation of support.

ATTACHMENTS

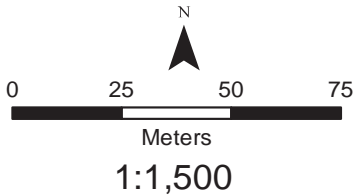
Site Location Map
Subject Property Map
Applicant Submission



Date: 4/16/2018

Site Location Map

Parcel F, Plan KAP28028, District Lot 317
Similkameen Div of Yale Land District
SEE CA4324140 FROM LOTS 45 & 46
Manufactured Home Reg.# 30343



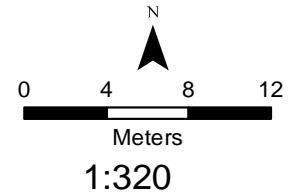
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Date: 2018-04-23

Subject Property Map

Parcel F, Plan KAP28028, District Lot 317
Similkameen Div of Yale Land District
SEE CA4324140 FROM LOTS 45 & 46
Manufactured Home Reg.# 30343



Subject Property
12 Chase Road



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The space below is provided to describe the proposed development. Additional pages may be attached.

I AM REQUESTING THIS VARIANCE FOR SETBACK AND HEIGHT TO RESOLVE A HANDSHIP ISSUE DUE TO A RESTRICTIVE ACCESS INTO THE PROPOSED GARAGE. THE HEIGHT VARIANCE IS TO ALLOW FOR ACCESS OF LARGER VEHICLES.

THERE IS A POWER POLE AND 2 LARGE CEDAR TREES IN FRONT OF THE ENTRANCE OF THE GARAGE WHICH WOULD MAKE IT DIFFICULT TO ACCESS THE DOORS. (APPROXIMATELY 21 FT BETWEEN THE GARAGE AND TREES/POWER POLE)

SEE ATTACHED DRAWING.

SETBACK FROM 3M TO 1.5M.

HEIGHT FROM 4.6M TO 5.5M.

RECEIVED

APR 04 2018

REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

Page 3 of 4

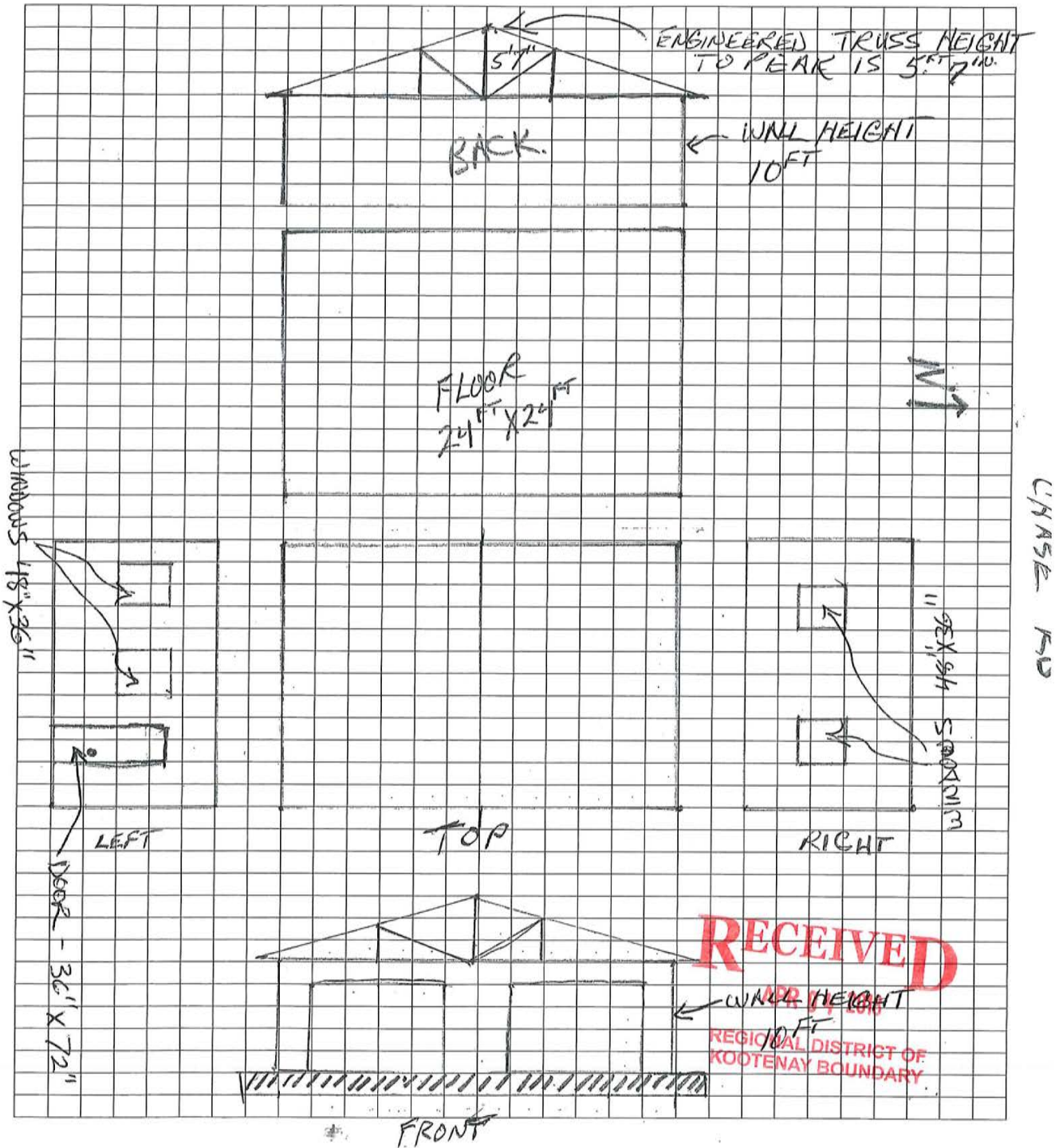
NOVA 5301 (10/05)

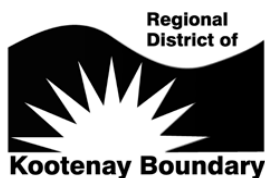
APPLICANT SUBMISSION

BUILDING SITE PLAN

1. Draw proposed location of home or building on space provided below, and show distances to all PROPERTY LINES. Also, show north arrow.
2. Show location of street access and names of streets.
3. Show location and distances of any water courses.

$10 = 2 \text{ FT}$





ELECTORAL AREA SERVICES (EAS) COMMITTEE STAFF REPORT

Date:	April 26, 2018	File #:	B-2404-06180.200
To:	Members of the Area 'B'/Lower Columbia-Old Glory APC		
From:	Ken Gobeil, Planner		
RE:	Development Permit Application- Smienk and Ravestein		

ISSUE INTRODUCTION

The RDKB has received an application for a Genelle/Rivervale Industrial Development Permit for a proposed meter building at 1055 Courtesy Road, Genelle, Electoral Area 'B'/Lower Columbia (see Applicant Submission).

HISTORY / BACKGROUND INFORMATION

Property Information	
Owner(s):	Johannes Smienk and Hendrik Ravestein
Location:	301 and 305 Courtesy Road, Genelle, Electoral Area 'B'/Lower Columbia-Old Glory
Legal Description:	District Lot 2404, KD
Current Use(s):	Multiple, including United Rentals and Gwil Crane
Land Use Bylaws	
OCP Bylaw No. 1470	Industrial Rural Resource 1
DP Area	Genelle/Rivervale Industrial
Zoning Bylaw No. 1540	1) Industrial 2 2) Industrial 3 3) Rural Resource 1 (RUR 1)
Other	
ALR	NA
Floodplain	NA

Page 1 of 4

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The subject property is adjacent to Highway 22 and Courtesy Road in Genelle. Access to the site is off Courtesy Road. A West Kootenay Power and Light Co. right of way runs through the property. There are multiple addresses assigned to this property, (301,303,305 and 1055 Courtesy Road) which are for various businesses on the property. These include United Rentals (301 Courtesy Road) and Gwil Crane (305 Courtesy Road). The developed areas of the property are within the industrial designation and development permit area of the Official Community Plan, and industrial zones of the Zoning Bylaw.

In 2010, Development Permit 394-10D was issued for a Bulk Oil and Fuel Storage facility at the end of Courtesy Road (1055 Courtesy Road). During review of the development permit application, it was determined that previous uses of the property required a Site Profile as per the *Environmental Management Act*. The Ministry of Environment issued conditional approval for that development. These conditions include provisions for future development of the property (see Ministry of Environment Conditions to Development Permit 394-10D):

the proponent obtains a statement from a qualified environmental consultant indicating the likelihood of offsite contaminant migration from Area 2 prior to any occupancy or reutilization of Area 1 (locations of Area 1 and Area 2 can be found on the attached site plan dated January 11, 2010);

PROPOSAL

The applicant proposes to construct an 8 ft by 12 ft meter building to service a proposed underground power supply. This underground power is for United Rentals and Gwil Crane. Crossing power lines can be dangerous for tall equipment. This proposal is intended increase the safety of these businesses on the subject property.

IMPLICATIONS

The applicant had stated that the portion of the property used in this application did not require a Site Plan under the *Environmental Management Act*. However, the procedure requires the whole property to be considered, so a referral was submitted to the Ministry of Environment and Climate Change Strategy regarding this proposal. It was noted that there are outstanding requirements for site investigation for the subject property (see Ministry of Environment Conditions to Development Permit 394-10D). The Ministry has stated that a Development Permit cannot be issued without the applicant obtaining either a Certificate of Compliance or another letter of release from their office.

Industrial Development Permit

The Industrial Development Permit Area was implemented as a way to ensure the form and character of industrial developments fit with the surrounding land uses. The guidelines for an Industrial Development Permit include the following:

Page 2 of 4

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- Revegetation of disturbed areas
- Landscaping
- Screening and fencing
- Access to roads and parking
- Building colours
- Lighting and illuminated signs
- Noise and vibration mitigation

The applicant has noted the following:

- Revegetation of disturbed areas:
The applicant notes there is no existing vegetation on the building site. There are no plans for revegetation once the development is complete.
- Landscaping:
The applicant notes that there are no plans for plants or vegetation. The applicant notes that snow plowing would kill existing plants.
- Screening and fencing:
The applicant notes that the area is screened from residential areas by the Highway. Additional screening is not recommended due to site security.
- Access to roads and parking:
It was noted that the proposed development would not have any effect on parking or road access.
- Building colours:
The building will be in natural colours in keeping with the development permit guidelines.
- Lighting and illuminated signs:
Proposed lighting is for security purposes only. The existing berm will shield surrounding residential properties from any light pollution.
- Noise and vibration mitigation:
It is anticipated that there will be no noise and vibrations emitted from the proposed building. The existing berm is expected to shield surrounding property owners should any noise be created.

ADVISORY PLANNING COMMISSION (APC)

During the May 7, 2018 meeting, the Electoral Area 'B'/Lower Columbia-Old Glory APC supported the application.

PLANNING COMMENTS

The applicants informed the RDKB that they are in the process of obtaining a release from the Ministry of Environment regarding the conditions to Development Permit No. 394-10D. The RDKB will need to receive a copy of the release from the Ministry of Environment prior to issuing a Development Permit.

Page 3 of 4

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RECOMMENDATION

That the staff report regarding the Development Permit application submitted by Johannes Smienk and Hendrik Ravestein to construct a meter building in the Genelle/Rivervale Industrial Development Permit Area on the parcel legally described as District Lot 2404, KD, Genelle, Electoral Area 'B'/Lower Columbia-Old Glory, be received.

ATTACHMENTS

Site Location Map

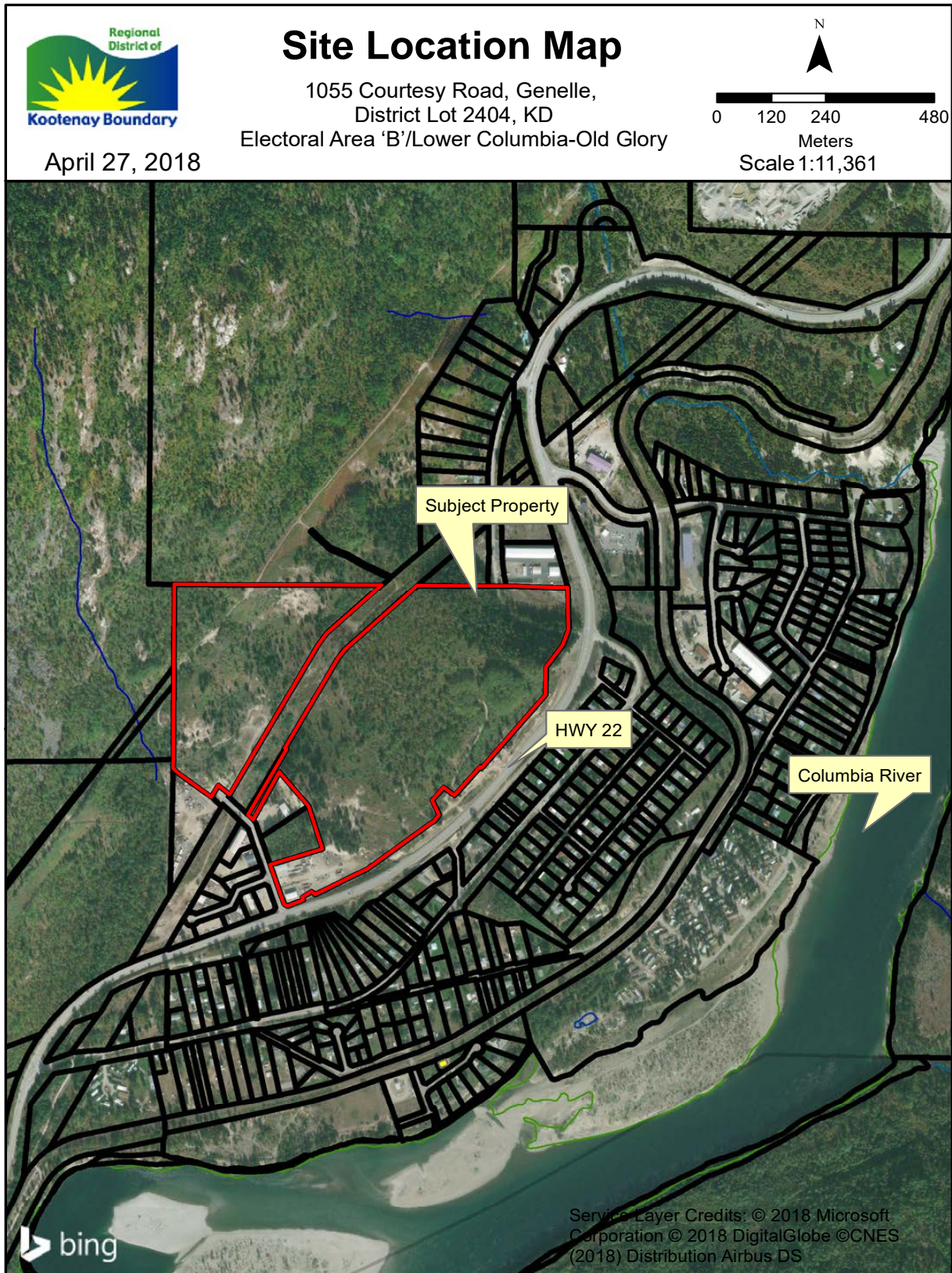
Subject Property Map

Applicant Submission

Ministry of Environment Conditions to Development Permit 394-10D

Page 4 of 4

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This project is to investigate the costs of providing underground electrical and communications services to our property.

If the costs are reasonable we would proceed with the construction of a meter building, being less than 100 sq. ft. in size. (Most likely 8x12 ft.) Locations are marked in Map 2 .

We are looking at underground services as a safety issue as our current renters, United Rentals and Gwil Crane use overhead equipment as well the aesthetics is more pleasing and would match how we service our existing two buildings. .

The building would be two tone coloured split face cinder block with a single door and a wooden truss and metal roofing system.

The building would also house security systems.

If the costs are deemed too high we would proceed with overhead electrical and communications services and abandon the permitting process as it would no longer be required.

Comments on Industrial Development Permit Guidelines

a)

There is currently no vegetation so no vegetation will be disturbed, the area will be covered in a compactable and dust free materials.

b)

Due to the requirement of snow ploughing and access no plant materials are contemplated.

c)

The area is screened from residential areas by the Highway which creates a berm due to the height differential, any additional screening will not have any effect or be required. We have been having problems with burglaries and have been advised to keep vegetation and lines of sight unobstructed for security cameras.

d)

The design is 100 % on private property and will have no impact on access, impede traffic or parking.

e)

The lane way will be surfaced in a material that minimizes dust.

f)

There are no parking expanses in this proposal.

g)

Buildings in this proposal are permanent as per guidelines.

h)

Colours are designed to have earth or neutral tones.

i)

Lighting will be for security and not have an impact on residential areas due to highway acting as a natural berm.

j)

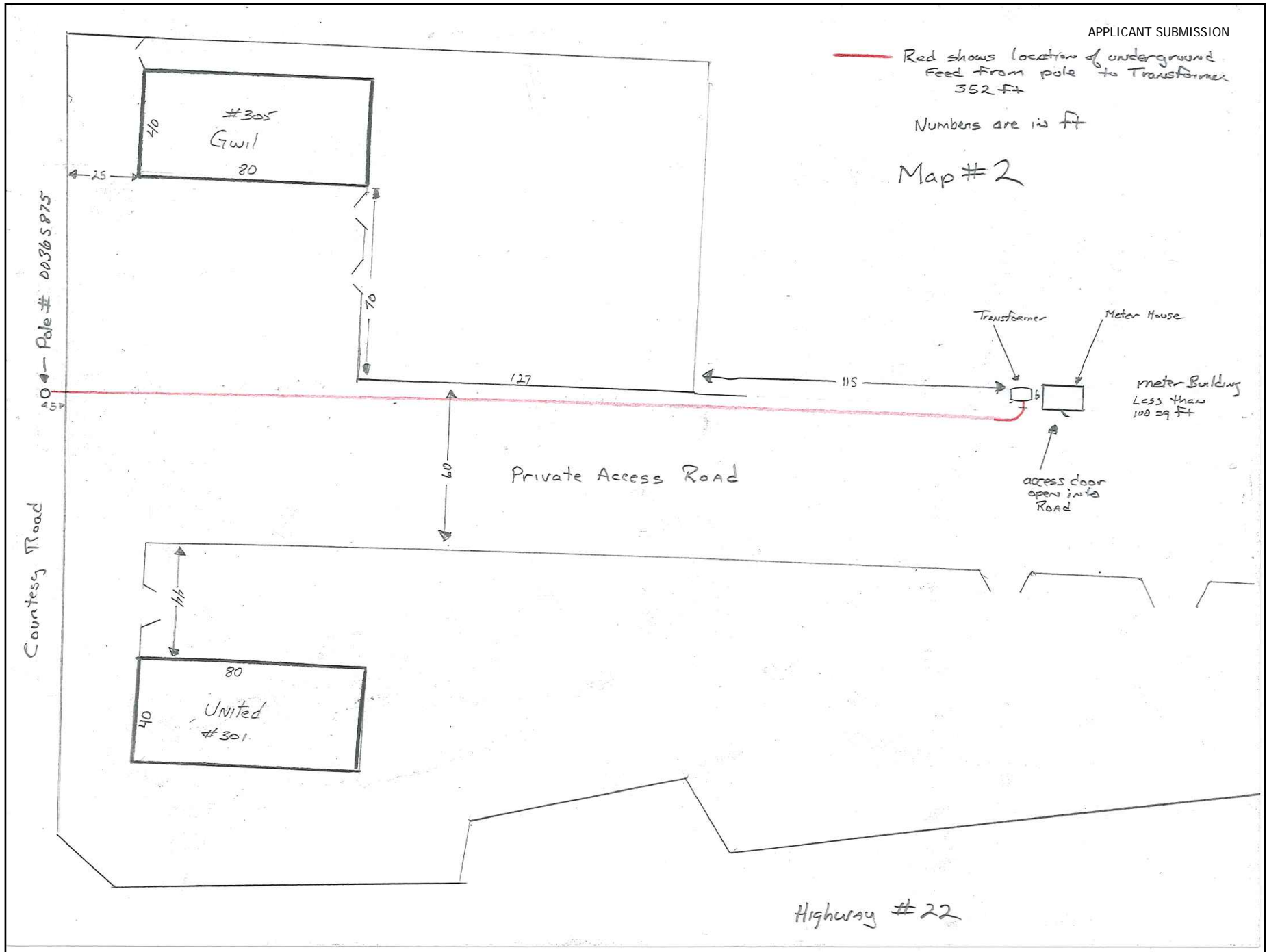
Highway will act as natural berm should noise be created, vibration is not expected from the Electrical metering houses.

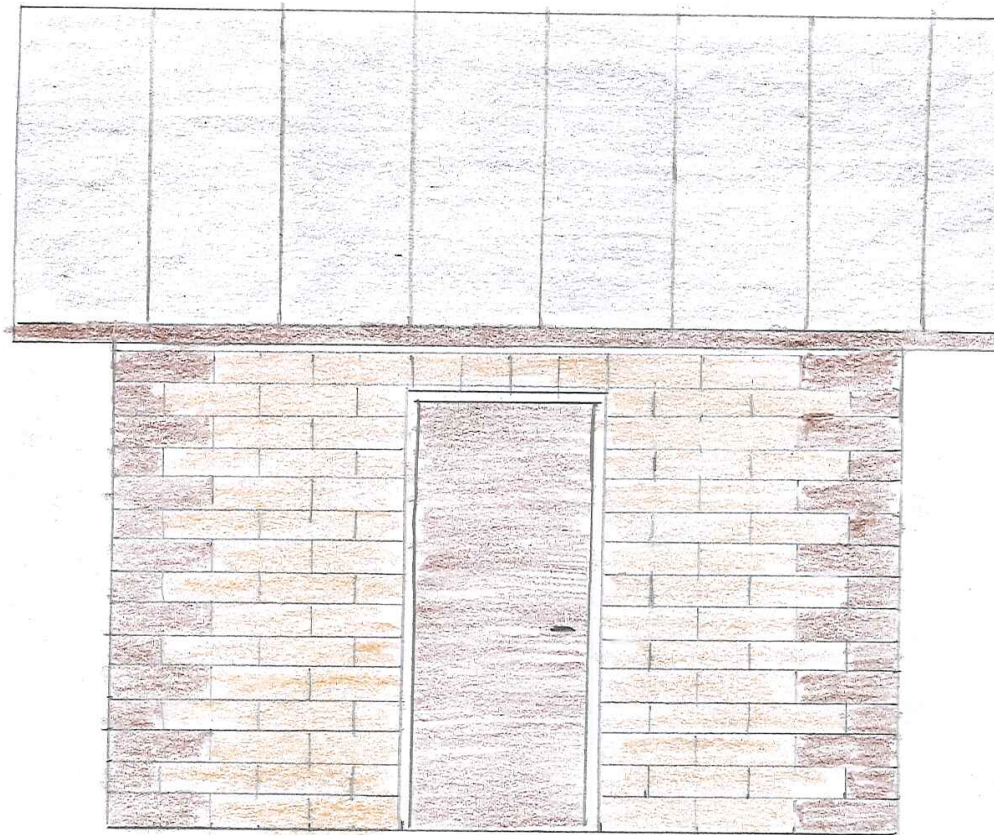
APPLICANT SUBMISSION

Red shows location of underground
feed from pole to Transformer
352 ft

Numbers are in ft

Map # 2





8x12ft Split Face
Cinder Block

3ft Access Door

Roofing Metal

Colour may Vary
depending on Block
availability

Design & Construction stay Same

APPLICANT SUBMISSION

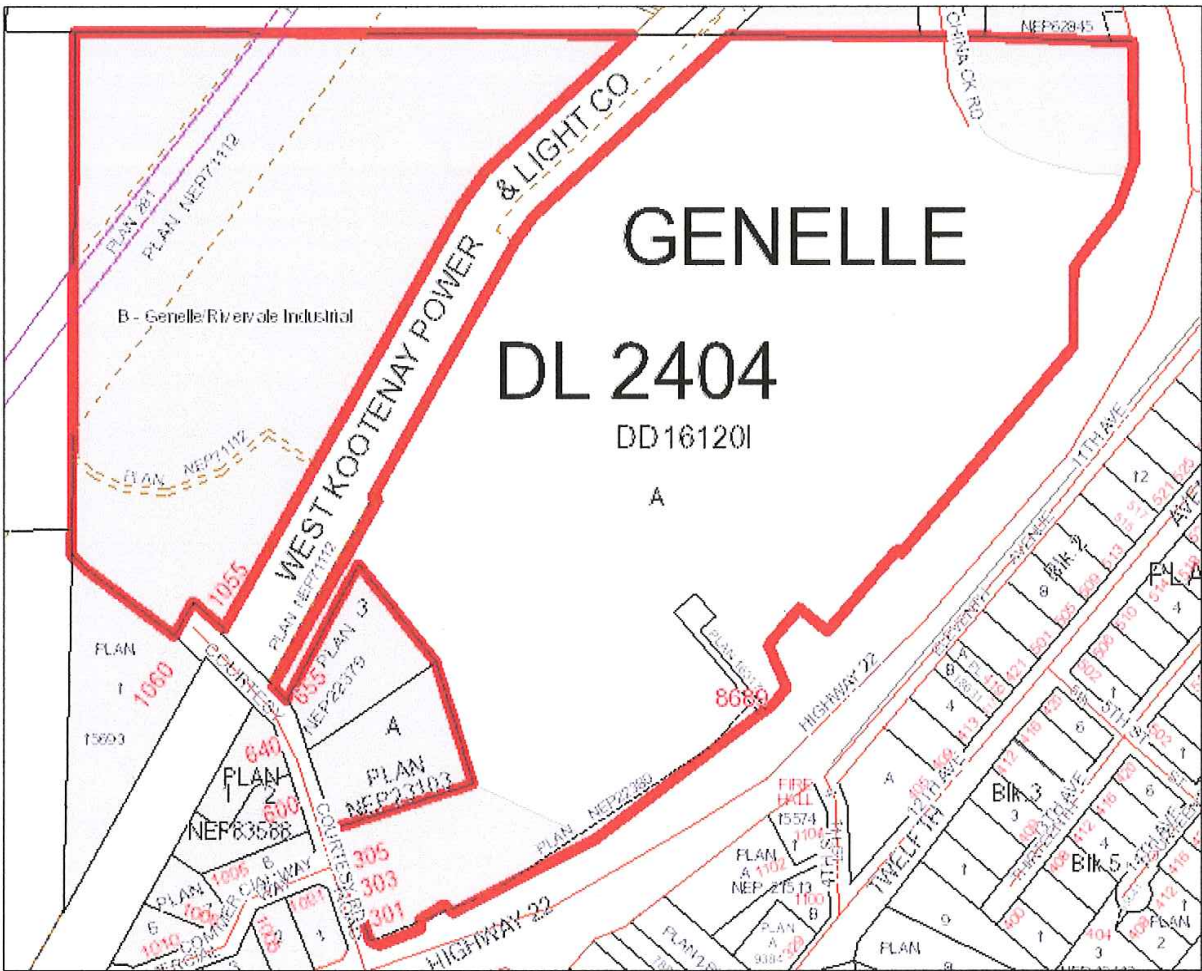


APPLICANT SUBMISSION



Parcel Report

Wednesday, October 25, 2017



Scale 1: 4,925

Legal Information

Plan:	Section:	Jurs: 711	Lot Area: 72.34
Block:	Township:	Roll: 6180200	Area Unit: acr
Lot:	Land District: 26	PID: 009-248-633	Width (ft): 0
District Lot: 2404	Electoral Area:		Depth (ft): 0
Street: 1055 COURTESY RD			
Description: Parcel A (SEE 161201) LYING TO THE NW OF R/W PL 6600 EXC (1) R/W 12 (2) PL 15693 NEP 22379 NEP23103.			

This report and map is for general information only. The RDKB does not guarantee its accuracy or correctness. All information should be verified.



Date: **FEB 12 2010**

Victoria File: 26250-20/11963
SITE 11963

Tri Gen Investments
6225 Highway 3A
Nelson, BC V1L 6S8
Attention: Josh Smienk

VIA FAX ONLY: 250-368-3990

Regional District of Kootenay Boundary
202 – 843 Rossland Avenue
Trail, BC V1R 4S8
Attention: Jeff Ginalias

Dear Mr. Smienk and Mr. Ginalias:

Re: Site Profile Submission – Development Permit Application
End of Courtesy Road, Genelle
PID: 009-248-633

This letter is to acknowledge receipt of the proponent's request for release of the above-referenced development permit. According to our records, there is an outstanding requirement for a preliminary site investigation for the subject site as outlined in our site profile decision letter dated December 7, 2009. We understand that, pursuant to the *Local Government Act*, or the *Land Title Act* in the case of subdivision, this decision will suspend approval of the subject application, or other future applications for the site identified in section 40 of the *Environmental Management Act*, until:

- the proponent has applied for, and obtained, one of the following *Environmental Management Act* instruments, as applicable: a determination that the site is not a contaminated site, a voluntary remediation agreement, an approval in principle of a remediation plan or a certificate confirming the satisfactory remediation of the site, and provided a copy of the instrument to the municipality as per sections 946.2(2)(c), (f) or (g) of the *Local Government Act* or approving officer as per sections 85.1(2)(c), (f) or (g) of the *Land Title Act*; or

**Ministry of
Environment**

Environmental Protection Division
Environmental Management Branch
Land Remediation

Mailing/Location Address:
Second Floor
10470 152 Street
SURREY BC V3R 0Y3

Telephone: (604) 582-5200
Facsimile: (604) 584-9751
<http://www.gov.bc.ca/env>

- 2 -

- the municipality or approving officer, as appropriate, has received notice from the ministry, pursuant to section 946.2(2)(d) of the *Local Government Act* or section 85.1(2)(d) of the *Land Title Act*, that the municipality or approving officer may approve a specific application under this section because, in the opinion of the director, the site would not present a significant threat or risk if the specific application were approved.

Based on the information provided, we are prepared to provide the necessary release so that the Regional District of Kootenay Boundary may proceed with approval of the development permit application. To that end, please accept this letter as notice pursuant to section 946.2(2)(d) of the *Local Government Act*, that the Regional District of Kootenay Boundary may approve the development permit application under this section because, in the opinion of the director, the site would not present a significant threat or risk if the development permit were approved, provided that:

1. The proponent retains a qualified environmental consultant to identify, characterize and appropriately manage any soil and/or water of suspect environmental quality encountered during any excavation work at the site;
2. The proponent obtains a statement from a qualified environmental consultant indicating the likelihood of offsite contaminant migration from Area 2 prior to any occupancy or reutilization of Area 1 (locations of Area 1 and Area 2 can be found on the attached site plan dated January 11, 2010);
3. In the event that contamination originating from Area 2 (i.e. on-site part) extends onto neighbouring land (i.e. off-site part):
 - the proponent must obtain an approval in principle of a remediation plan for the off-site part prior to any occupancy or reutilization of Area 1.
4. Site investigation and any required remediation is completed in Area 1 and a determination that the site is not contaminated or a certificate confirming satisfactory remediation of the site is obtained for that area;
5. In the event that contamination originating from Area 1 (i.e. on-site part) extends onto neighbouring land (i.e. off-site part):
 - the certificate must include Area 1 and the off-site part, or alternatively;
 - the proponent must obtain a certificate for Area 1 and an approval in principle of a remediation plan for the off-site part prior to occupancy or reutilization of Area 1, where upon completion of remediation, a certificate will be obtained for the off-site part.

- 3 -

The above opinion is restricted to threat or risk associated with contamination.

Please also be advised of the following:

- The ministry recommends that the proponent review all aspects of the government's contaminated sites legislation and supporting guideline documents and protocols to ensure that all required information is collected and documented during investigation and where necessary, remediation of the site;
- In cases of site demolition, we recommend that a survey of building materials and equipment be undertaken to identify any materials that require special management;
- Fees are applicable for the ministry's contaminated sites services, pursuant to section 9 of the Contaminated Sites Regulation. Information on the government's contaminated sites legislation and supporting guideline documents and protocols as well as a Contaminated Sites Services Application Form can be obtained from the ministry's Land Remediation web page located at: <http://www.env.gov.bc.ca/epd/remediation/>;
- Please be advised that under the authority of the *Environmental Management Act*, all applications eligible under Protocol 6 shall be submitted as roster submissions by an approved professional. For further clarification of application eligibility please see http://www.env.gov.bc.ca/epd/remediation/policy_procedure_protocol/index.htm; and
- Those persons undertaking site investigations and remediation at contaminated sites in British Columbia are required to do so in accordance with the requirements of the *Environmental Management Act* and regulations (e.g. Contaminated Sites Regulation, Hazardous Waste Regulation, etc.). The ministry considers these persons responsible for identifying and addressing any human health or environmental impacts associated with the contamination.

The site owner agrees to indemnify and save harmless the Crown and her employees against all loss, damages, costs, actions, suits and claims arising from any contamination remaining on-site. Decisions of a director may be appealed under part 8 of the *Environmental Management Act*.

- 4 -

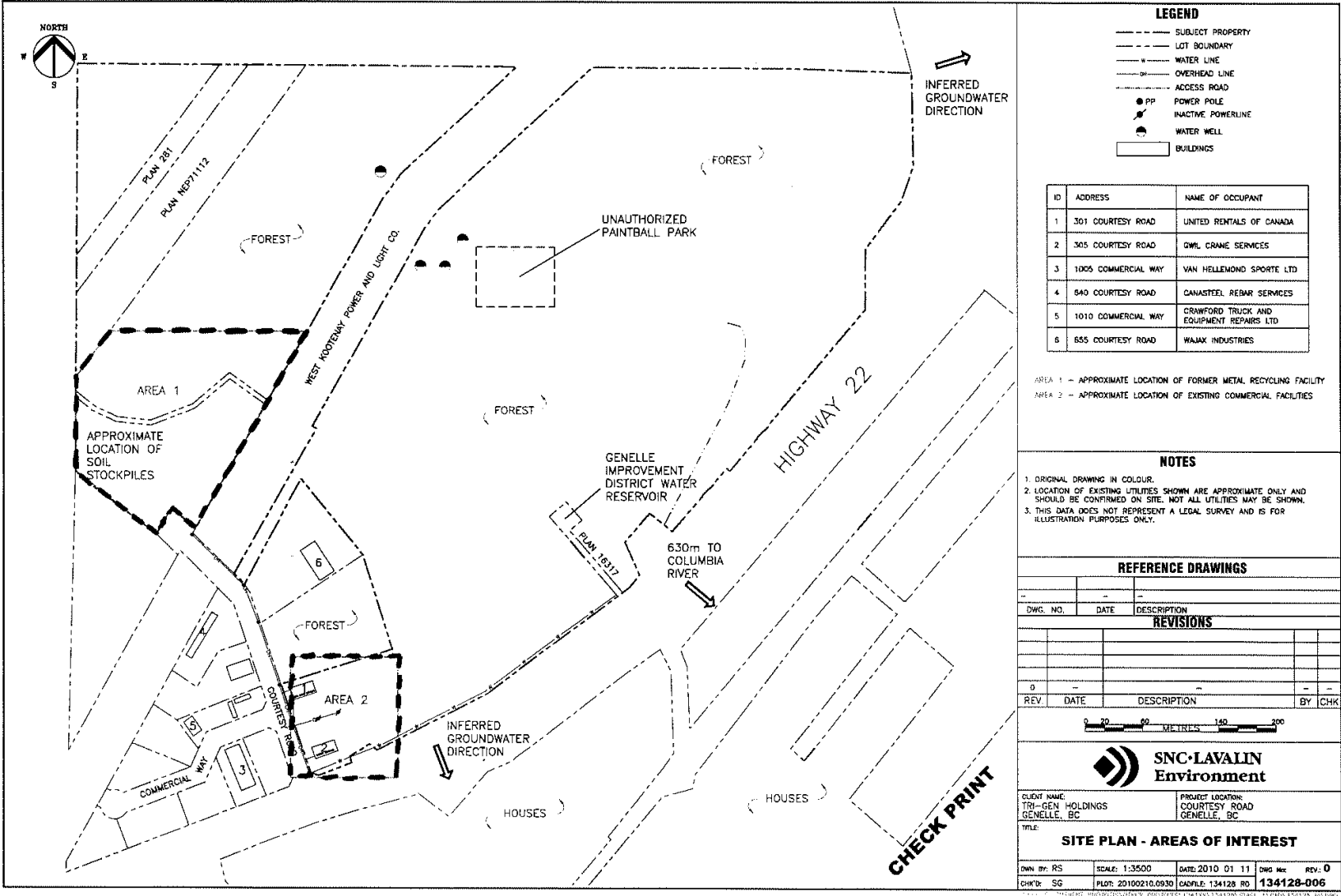
Please contact the undersigned at 604-582-5266 if you have any questions about this letter.

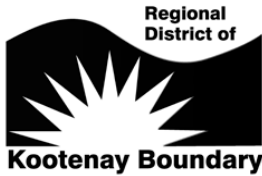
Sincerely,

A handwritten signature in black ink, appearing to read 'Tyler O'Grady', is written over the printed name.

Tyler O'Grady
for Director, *Environmental Management Act*

cc: Suzanne Girard, SNC-Lavalin Environment Inc., Fax: 250-368-3206





ELECTORAL AREA SERVICES (EAS) COMMITTEE STAFF REPORT

Date:	May 10, 2018	File #:	E-1545-00118.050
To:	Director Worley and Members of the Electoral Area Services (EAS) Committee		
From:	Ken Gobeil, Planner		
RE:	Ministry of Transportation and Infrastructure - Subdivision		

ISSUE INTRODUCTION

The RDKB has received a subdivision referral from the Ministry of Transportation and Infrastructure (MoTI) for a subdivision near Beaverdell, Electoral Area 'E' / West Boundary (see Site Location Map; Subject Property Map; Applicant Submission).

HISTORY / BACKGROUND INFORMATION

Property Information	
Owner(s):	David Heubner and Daniel Kaufman
Agent	Rob Macdonald (Runnalls Denby)
Location:	28 Mulhern Road, Beaverdell,
Electoral Area:	Electoral Area 'E' / West Boundary
Legal Description(s):	District Lot 1545, SDYD
Area:	10.7 hectares (26.5 acres)
Land Use Bylaws	
OCP	NA
Zoning Bylaw	NA
Other	
ALR:	Partial
Waterfront / Floodplain	NA

The subject property is on the north end of Beaverdell. Most of the property is within the Agricultural Land Reserve (ALR). A small portion of the subject property has access

Page 1 of 2

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to Highway 33. There is a burned house on the portion of the property not within the ALR; there is an old barn on the portion of the property within the ALR.

PROPOSAL

The applicant proposes to subdivide the property separating the portion of the property within the ALR and the portion of the property out of the ALR (see Applicant Submission).

IMPLICATIONS

There are no land use bylaws within this portion of Electoral Area 'E'/West Boundary and, as such, no policies or documents can be referenced regarding the proposed land use or parcel size. The Interior Health Authority recommends a 1-hectare minimum parcel size for new parcels created by subdivision that are not connected to a community water system. Both proposed parcels are over 1 hectare. The applicant has also included a Sewerage Disposal Assessment for this proposed subdivision.

Road access for the portion of the property not within the ALR will be from Mulhern Road. Road access for the portion of the property in the ALR will be from Highway 33. Referral to the Agricultural Land Commission (ALC) is not required for this subdivision because the portions of the property that are within the ALR are not affected by this proposed subdivision. Parkland dedication is not required for this subdivision.

ADVISORY PLANNING COMMISSION (APC)

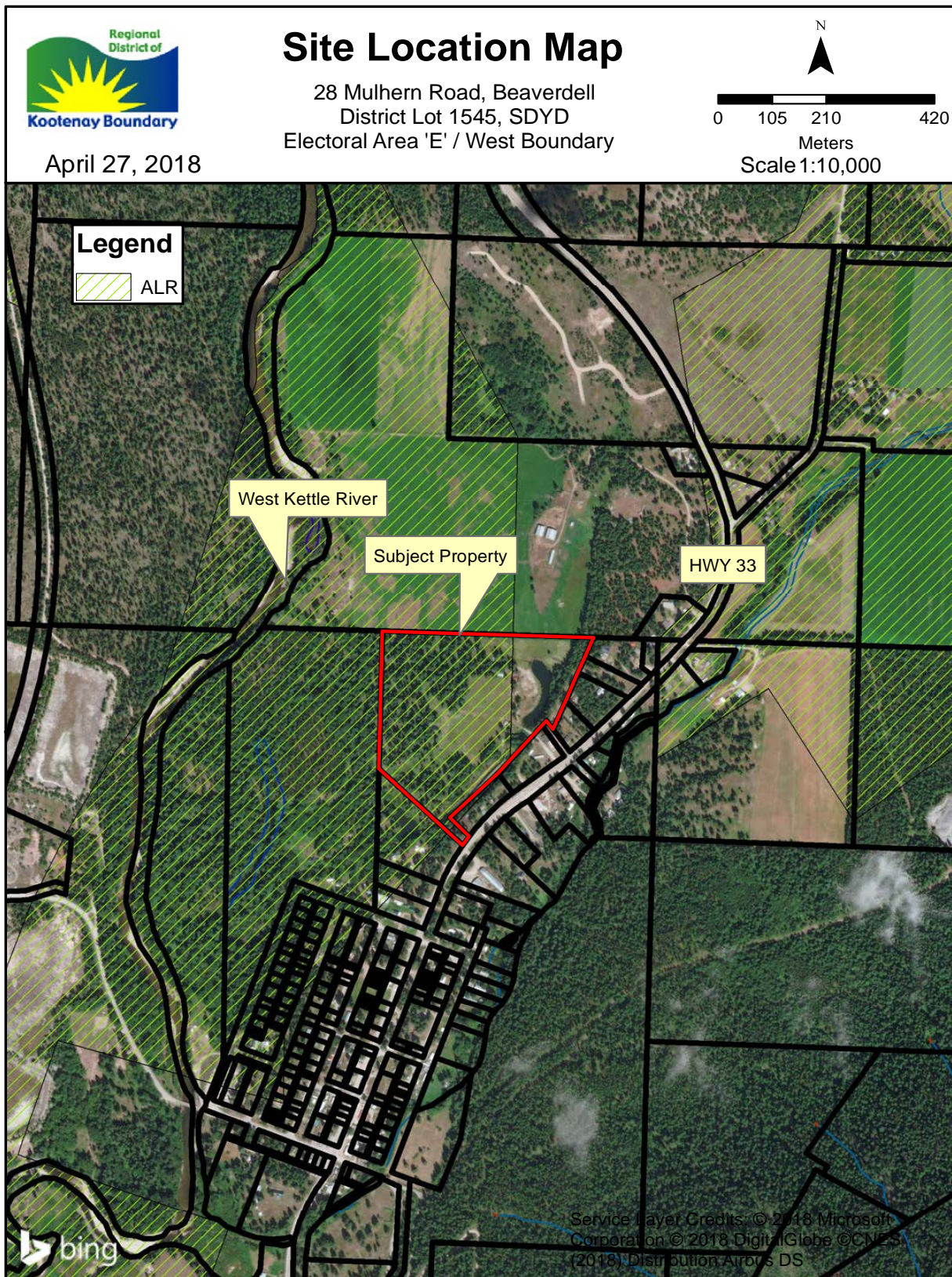
During the May 7, 2018 Electoral Area 'E'/West Boundary meeting, the subdivision referral was supported.

RECOMMENDATION

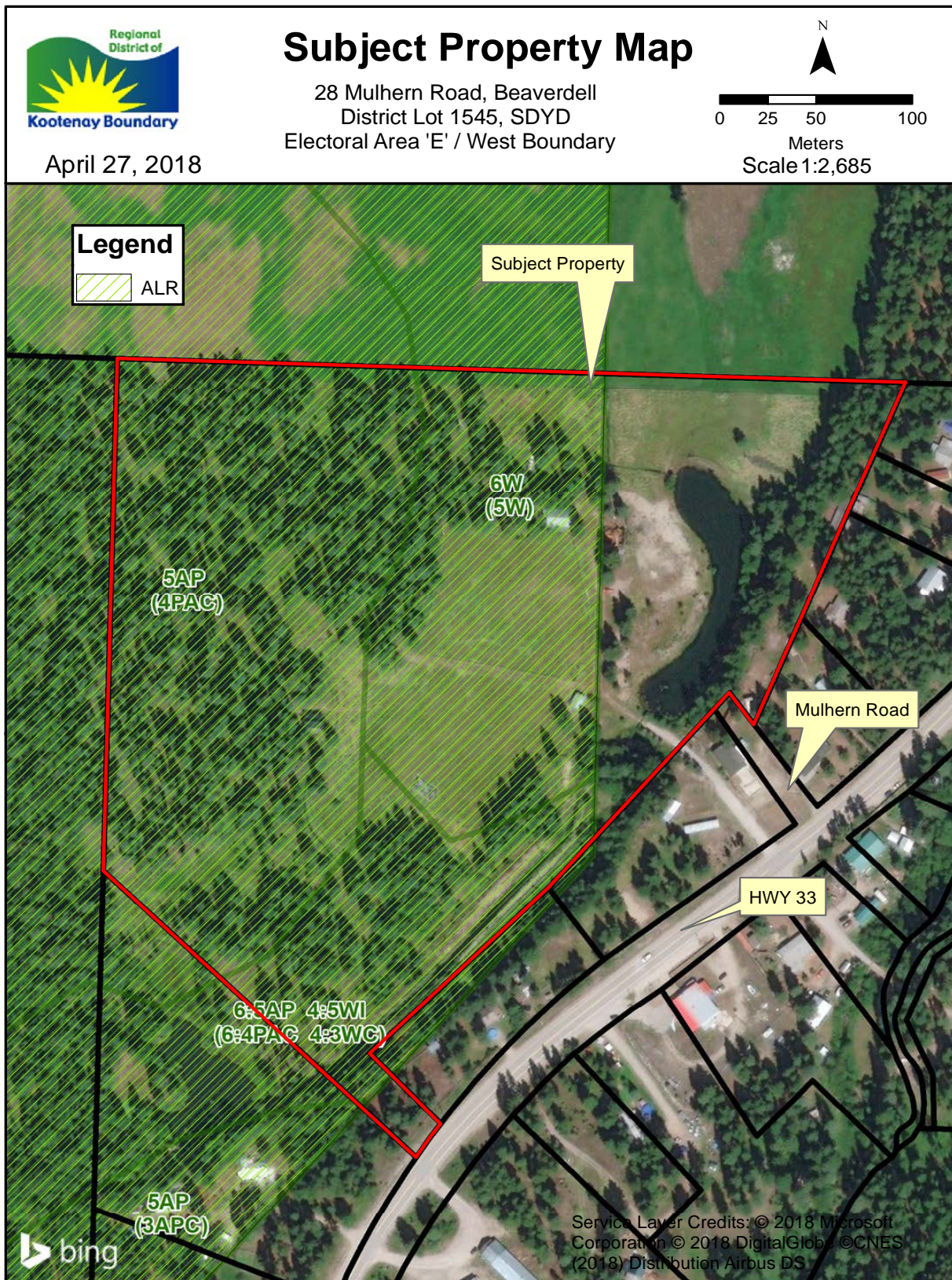
That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed subdivision, for the parcel legally described as District Lot 1545, SDYD Beaverdell, Electoral Area 'E'/West Boundary be received.

ATTACHMENTS

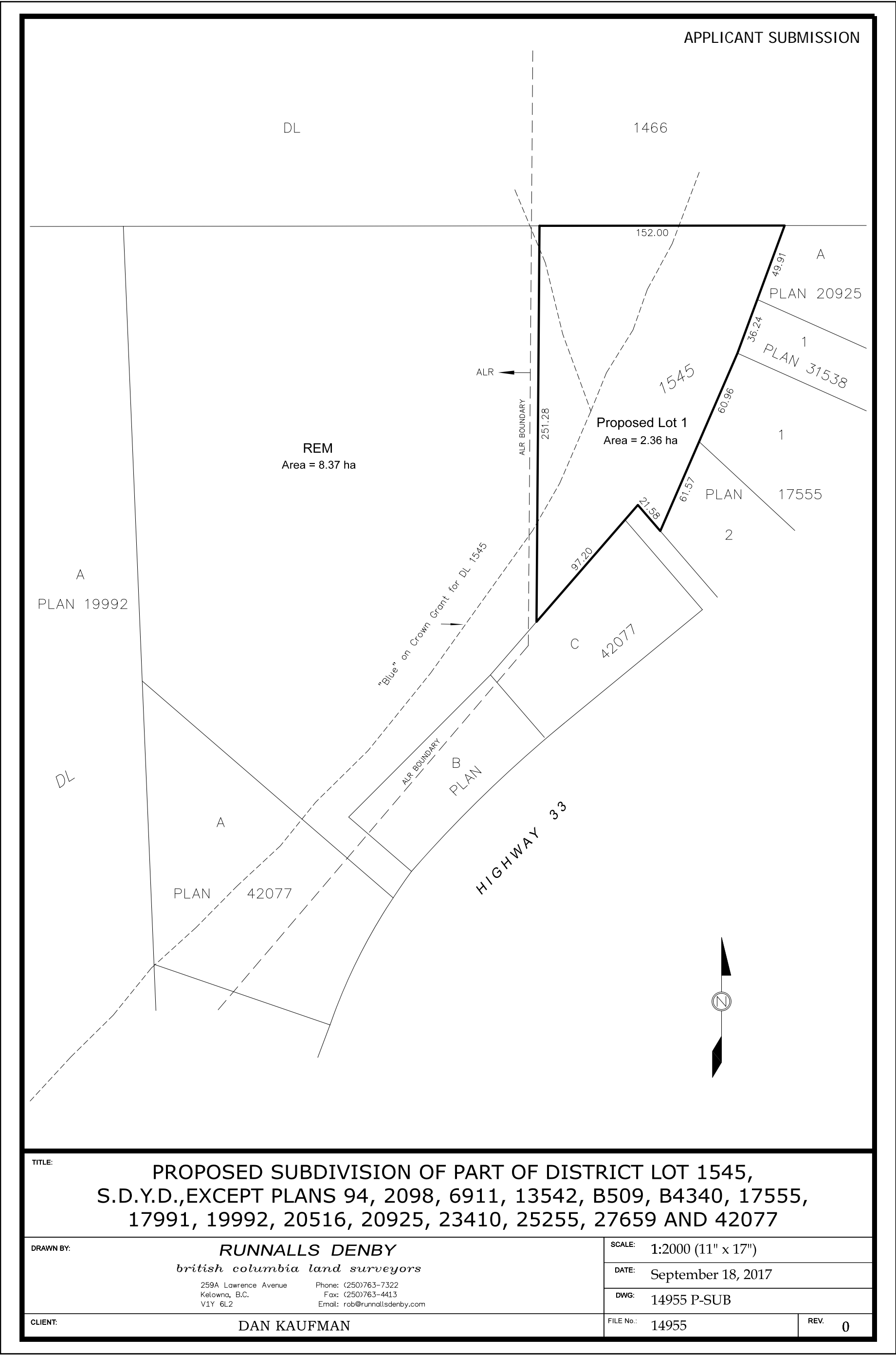
Site Location Map
Subject Property Map
Applicant Submission



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DeansTech Consulting Ltd.

November 9, 2017

DTC File No: J17-01551

Dan Kaufman
 6475 Hwy 33
 P.O. Box 240
 Beaverdell, BC
 V0H 1A0

Dear Sir:

**Re: Sewage Dispersal Assessment for Potential
 Subdivision of Part of District Lot 1545, SDYD
 Mulhern Road, Beaverdell, BC**

1.0 INTRODUCTION

DeansTech Consulting Ltd. (DTC) has been retained by Mr. Dan Kaufman, property owner, to conduct a preliminary sewage dispersal assessment on the above noted property, which is intended to be subdivided. We understand the property is currently 10.7 hectares (26.5 acres) in size and the owner wishes to subdivide a 2.36 hectare parcel from the main parcel, which will be 8.4 hectares after subdivision. The proposed new lot is located at the northeast portion of the main lot. The attached Figure 1 presents the proposed lot configuration and the soil testpit locations and Figure 2 shows the required dispersal areas for an operating and reserve area on each proposed new lots.

DTC's scope of work included the excavation of testpits in an area proposed for sewage dispersal on the proposed new lot and the remainder lot and to conduct percolation testing and preparation of a letter report and plans presenting the findings of our investigation. DTC's scope of work was designed to meet and or exceed the Standard Practice Manual (Version 3) (SPM) and the Interior Health Subdivision Guideline July 2007.

2.0 FIELD ASSESSMENT**2.1 Background**

The property is located off Mulhern Road in Beaverdell, BC, and the legal description of the property is Part of District Lot 1545, SDYD. The property is bounded by small residential lots to the east and south with undeveloped large rural acreages to the west and north.

The property is developed with a barn at the northeast portion of the lot a water well and a former burned house is located centrally on the lot. The remainder of the property is mainly tree covered with some cleared grass covered sections. A small pond is located at the northeast corner of the proposed Lot 1 and a small creek flows along the southeast edge of the property limits.

DTC -

10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
 Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p e-mail: deans1@shaw.ca

November 9, 2017

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DTC personnel attended the site on September 12, 2017 to carry out field testing and monitor the excavation of testpits on the proposed new lot and on the remainder lot. The findings of our site reconnaissance and field assessment are presented in the following subsections. The property boundary and proposed lot layout are presented on the attached Figure 1 & 2.

2.2 Site Topography and Features

The topography of the site can be described as flat to gently sloping to the west down towards the West Kettle River, which is located a few hundred metres to the west of the subject site. The West Kettle River is approximately 2 m lower than the subject property. The slope in the area proposed for sewage dispersal was measured to be 1 to 2%.

2.3 Soil Conditions

DTC monitored the excavation of 5 testpits for proposed dispersal areas on the lots.

The testpits were excavated in the area proposed for sewage dispersal and are generally about 50 to 80 feet apart. The testpits were excavated to 8 feet below present grade. The soil conditions observed in the testpits generally consisted of loamy sand to various thickness (maximum of 2.5 feet) overlying clean sand. The loamy sand was observed to be fine grained, firm, dry and was medium yellowish brown. The underlying sand was fine to medium grained, compact, damp and was a medium yellowish brown. On proposed Lot 1, clean sand & gravel fill was present down to 2.5 feet below grade overlying organic loam topsoil and then sand.

Bedrock was not observed in any of the testpits. Minor groundwater seepage was noted at the base of TP-4 at 5 feet below grade. There is greater than 4 feet of vertical separation to the water seepage. Detailed soil logs are presented on the attached Table 1 and testpit locations are presented on Figure 1.

2.4 Percolation Rates

A total of 5 percolation tests were carried out and percolation results ranged from 2.0 to 5.0 minutes per inch at a depth of approximately 0.60m (2.0 to 3.0 feet) below grade. The locations of the percolation tests and rates are presented on the attached Figure 1 and the rates are also presented with the soil logs in Table 1.

Based on visual observations of the soil conditions on the site, the percolation rates measured appear reasonable for the soil type encountered. Generally, the soil and percolation rates encountered on the property are considered favourable for sewage dispersal purposes and the loamy nature of the soil is key to sufficient renovation of the sewage effluent.

We suggest a conservative percolation rate of 5 minutes be used for sizing the dispersal

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10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p e-mail: deans1@shaw.ca

November 9, 2017

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fields for the proposed lots. This translates to a soil hydraulic loading rate of 35 litres/m²/day (0.71 Ig/ft²/day) for Type 1 effluent.

2.5 Water Wells

A search of the BC water well registry indicates an offsite waterwell south of the property, which was measured to be approximately 180 metres from the closest proposed dispersal system. Furthermore, there is an onsite well that services the existing burned house and is located greater than 30 metres from the closest proposed dispersal system area. A copy of the well map is attached for reference.

2.6 Flood Plain

Based on the SPM guidelines, the infiltrative surface must be at least 0.6 m above the 1 in 20 year flood plain level. Based on elevations noted on google earth, the proposed dispersal areas were located to be 2.0 m above the normal West Kettle River water level.

3.0 SYSTEM SIZING

The Interior Health Subdivision Guideline dated July 2007 Appendix 2, Table 1, presents the area required for discharge area for a 4 bedroom house (max 2530 ft²) based on Type 1 effluent, the percolation rate and the slope.

We suggest the use of a percolation rate of 5 minutes per inch be used for sizing the drain fields for the proposed new lot and remainder parent lot. This translates to a hydraulic conductivity of approximately 3000 mm/day (kfs) and a soil hydraulic loading rate of 35 litres/m²/day (0.71 Ig/ft²/day).

For the proposed new lots, with an average 3000 kfs (5 min/inch) soil porosity and a slope of approximately 2%, an area equal to 567 m² (6,100 ft²) is required, this is equal to an area of approximately 21m by 27m. This includes the 3m (10 feet) setback on all sides.

The attached Figure 2 presents the proposed potential sewage dispersal location for an operating and reserve area on each of the proposed new lots.

The proposed new lots have enough area to support an operating dispersal field and reserve area that would service a 4 bedroom home up to 235m² (2530 ft²) and with a daily effluent flow rate of 1,700 litres (375 Igpd).

A copy of the Interior Health Decision Document is attached for reference.

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10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
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4.0 SEWERAGE SYSTEM STANDARD PRACTICE MANUAL

DTC has reviewed the requirements of the Sewerage System Standard Practice Manual (SPM) and compared the findings of the field investigation to the manual. We provide the following comments regarding site conditions:

Site Capability and System Type

Based on the average percolation test rate of 5 min/inch, soil texture and soil structure, a 2% average slope on the property and depth of native soil cover (5 feet) the proposed lots are suitable for the installation of Type 1 systems.

Hydraulic Loading Rates

Based on the type of soil observed and the percolation rates observed, the following wastewater loading rates can be considered applicable;

Type 1 effluent - 0.71 gallons/foot²/day (35 litres/m²/day)

Type 2 effluent – 1.30 gallons/foot²/day (65 litres/m²/day)

Type 3 effluent – 1.80 gallons/foot²/day (90 litres/m²/day)

Rates were obtained from Table 2-8 of the revised September 21, 2007, SPM.

Setback Requirements

Breakout point:

Type 1 & 2 gravity systems – 50 feet (15m)

Type 1 & 2 pressure distribution – 25 feet (7.5m)

Type 3 pressure distribution – 25 feet (7.5m)

Setback distances were obtained from Table 2-6 of the SPM

Waterwell Setback Requirements

An offsite waterwell south of the property was measured to be approximately 180 metres from the closest proposed dispersal system. Furthermore, an onsite well is located greater than 30 metres from the closest proposed dispersal system. These distances meet both the SPM and the provincial requirement of 30m. When drilling new waterwells on the properties ensure they meet the 30m setback from the sewage system (tanks & dispersal area).

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10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8

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November 9, 2017

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Offsite and Onsite Impacts

During our site investigation, DTC did not observe any offsite developments that may affect the sewage systems on the subject site. Based on our field investigation and soil types encountered, it is our opinion that onsite sewage dispersal will not affect offsite properties. The soils encountered on the site will allow the effluent to infiltrate in a vertical and horizontal direction; therefore there is a very low risk of effluent breakout on the subject site or adjacent properties.

5.0 CONCLUSIONS

DTC has carried out a preliminary sewage dispersal assessment for the proposed subdivision at Mulhern Road in Beaverdell, BC, and the legal description of the property is Part of District Lot 1545, SDYD. A total of 5 testpits were excavated and 5 percolation tests were carried out in the area proposed for sewage dispersal on the two lots.

The soil conditions observed in the testpits generally consisted of loamy sand to various thickness (maximum of 2.5 feet) overlying clean sand. The loamy sand was observed to be fine grained, firm, dry and was medium yellowish brown. The underlying sand was fine to medium grained, compact, damp and was a medium yellowish brown.

A total of 5 percolation tests were carried out and percolation results ranged from 2.0 to 5.0 minutes per inch at a depth of approximately 0.60m to 0.90m (2.0 to 3.0 feet) below grade.

For the proposed new lot and remainder lot, with an average 3000 kfs (5 min/inch) soil porosity and a slope of approximately 2%, an area equal to 567 m² (6,100 ft²) is required, this is equal to an area of approximately 21m by 27m. This includes the 3m (10 feet) setback on all sides.

It is our opinion, based on observations made and field testing done during the field investigation, that the proposed new lots have enough area to support an operating and reserve area for sewage dispersal.

A minimum setback of 15m, for Type 1 effluent, from the top of any cut banks or natural slopes steeper than 30%, or bedrock outcrops must be maintained when installing drain fields.

This report does not provide a specific sewage system design for a home and there is no sewage dispersal permit attached to this report. A sewage dispersal permit must be applied for separately once the subdivision process is complete and prior to applying for a building permit. Please contact DTC to obtain a sewage permit.

DTC –

10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p e-mail: deans1@shaw.ca

November 9, 2017

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6.0 CLOSURE

Use of this report is subject to the attached General Conditions. The reader's attention is specifically drawn to these conditions, as it is essential that they be followed for the proper use and interpretation of this report.

We trust this report meets with your approval. Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,
DEANSTECH CONSULTING LTD.



Richard Deans, C. Tech. ROWP 0340
Groundwater Technician

Attachments: Table 1, Detailed Soil Logs
Figure 1, Overall Lot Layout and Testing Location Plan
Figure 2, Proposed Operating & Backup Dispersal Location Plan
Water Well Search
Interior Health Subdivision Guideline (Appendix 2 – Table 1)
General Conditions

Dan Kaufman

Phone – 519-274-3453

DTC –

10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p e-mail: deans1@shaw.ca

September 12, 2017

1

J17-01551

TABLE 1
SOIL DESCRIPTION

Dan Kaufman

Mulhern Road, Beaverdell, BC

Testpit #	Depth (feet)	Location	Percolation Test Result Min/inch	Slope Angle (%)	Soil Description, depth in inches
1	8.0		Upper fill sand 6.0 minutes Lower sand 5 minutes	2	0 – 2.0 – TOPSOIL – organics, silty, soft, damp, dark brown. 2.0 – 32.0 – SAND & GRAVEL (FILL) – well graded, clean sand lenses in places, loose to compact, dry, medium yellowish brown. 32.0 – 48.0 – ORGANIC LOAM – soft, damp, dark brown. 48.0 – 84.0 – SAND – fine grain, damp to moist, compact, medium greyish brown. No groundwater, no bedrock.
2	7.0		3.0 minutes in lower sand	2	0 – 2.0 – TOPSOIL – organics, silty, soft, damp, dark brown. 2.0 – 24.0 – SAND & GRAVEL (FILL) – well graded, clean sand lenses in places, loose to compact, dry, medium yellowish brown. 24.0 – 30.0 – ORGANIC LOAM – soft, damp, dark brown. 30.0 – 84.0 – SANDY LOAM – fine grain, firm, damp to moist, medium greyish brown. No groundwater, no bedrock.
3	5.0		3.0 minutes in lower sand	2	0 – 4.0 – TOPSOIL – organics, silty, soft, damp, dark brown. 4.0 – 12.0 – LOAMY SAND – fine grained, firm, dry, medium yellowish brown. 12.0 – 60.0 – SAND – fine to medium grain, clean, damp, medium yellowish brown. No groundwater, no bedrock.
4	5.0		2.0 minutes in lower sand	2	0 – 4.0 – TOPSOIL – organics, silty, soft, damp, dark brown. 4.0 – 12.0 – LOAMY SAND – fine grained, firm, dry, medium yellowish brown. 12.0 – 60.0 – SAND – fine to medium grain, clean, damp, compact, medium yellowish brown. Minor groundwater seepage at base, no bedrock.

DTC –

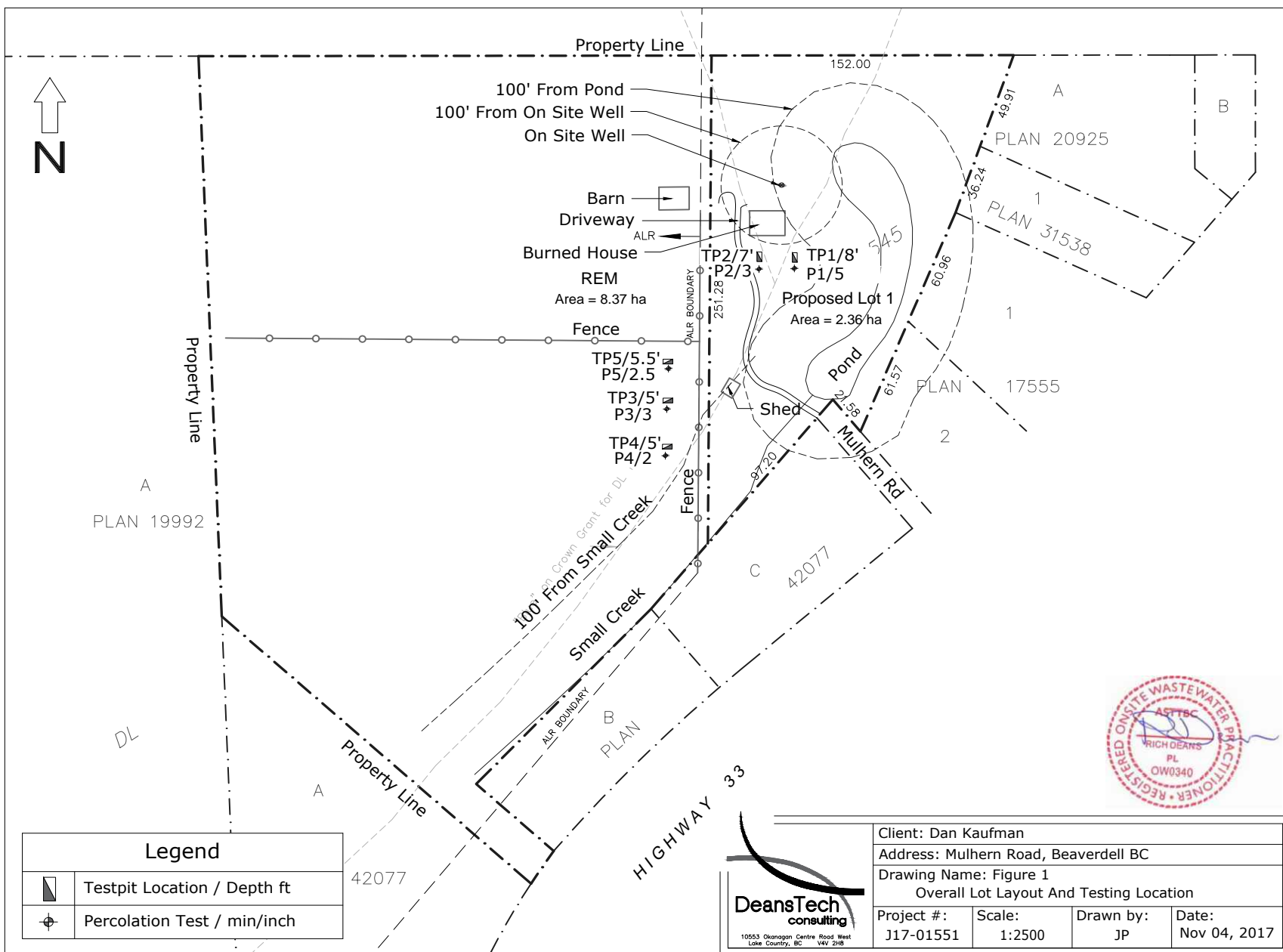
10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p
e-mail: deansl@shaw.ca

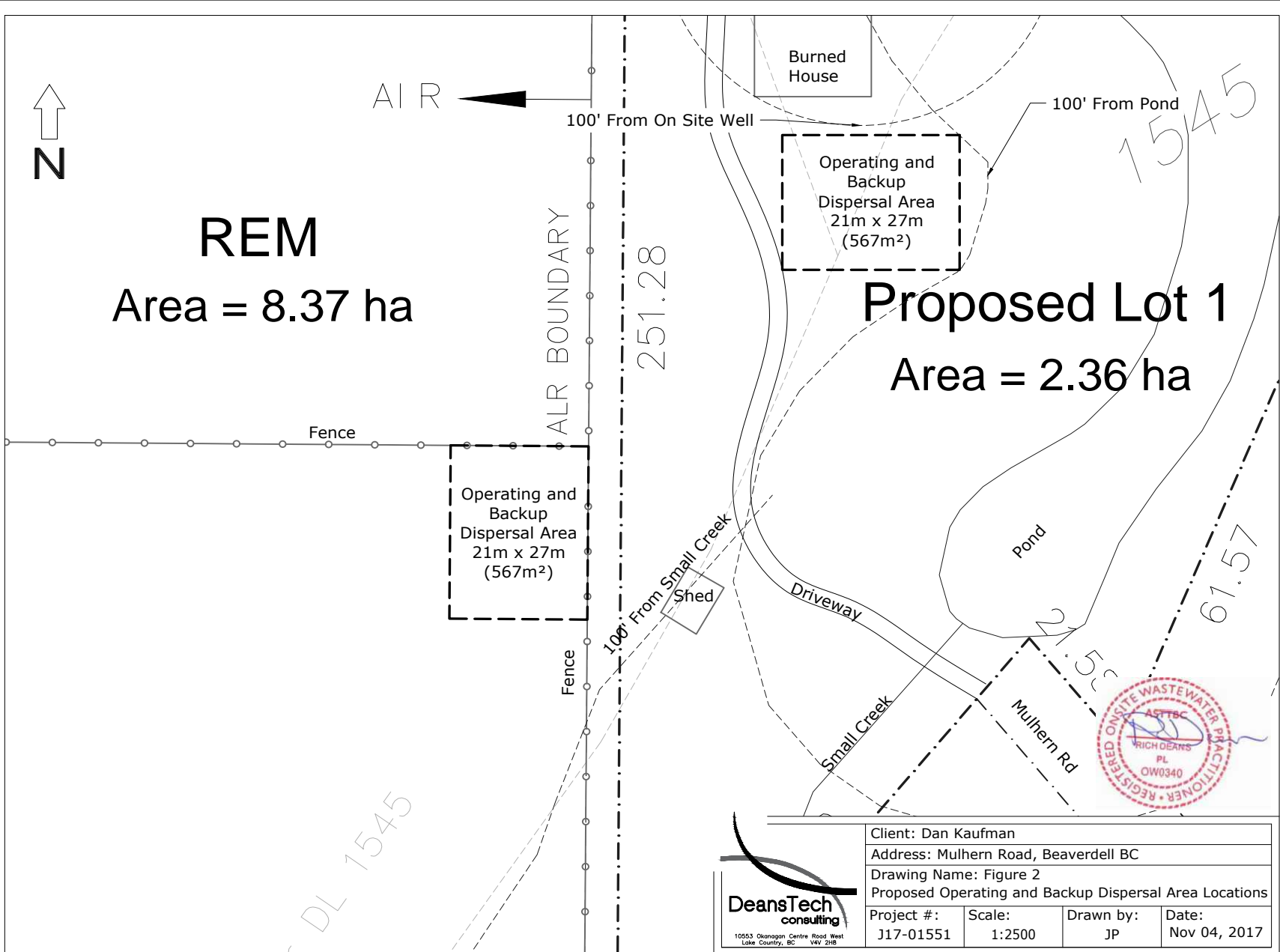
APPLICANT SUBMISSION

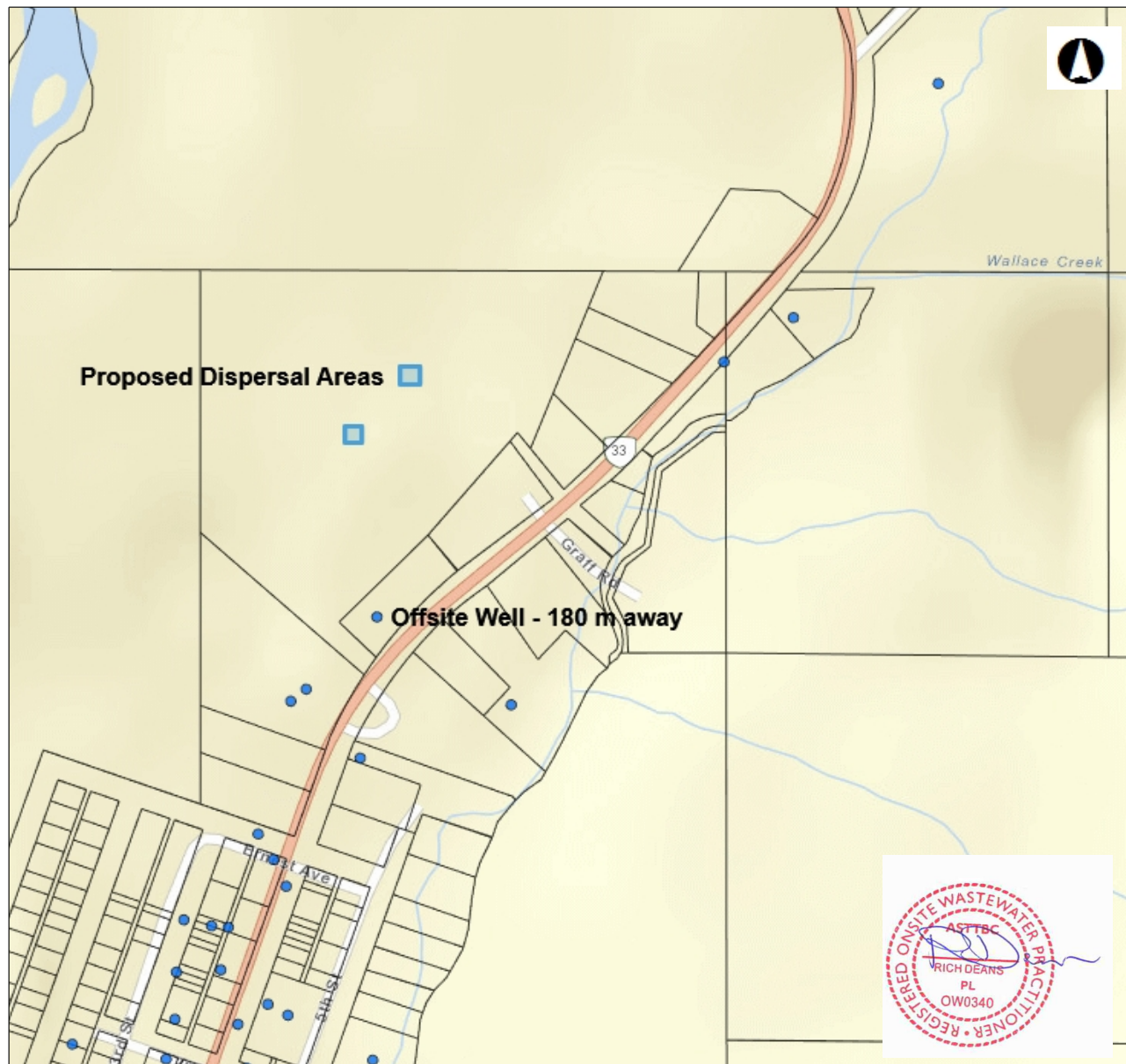
5	5.5		2.5 minutes in lower sand	2	0 – 4.0 – TOPSOIL – organics, silty, soft, damp, dark brown. 4.0 – 20.0 – LOAMY SAND – fine grained, firm, dry, medium yellowish brown. 20.0 – 66.0 – SAND – fine to medium grain, clean, damp, compact, medium yellowish brown. No groundwater, no bedrock.
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DTC –

10553 Okanagan Centre Road West, Lake Country, B.C. V4V 2H8
Phone: (250) 766-0533 p Fax: (250) 766-0513 p Cell: (250) 317-6728 p e-mail:
deans1@shaw.ca



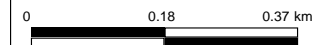




Water Resources Atlas

Legend

- Water Wells - All
- Integrated Cadastral Fabric



1: 9,028

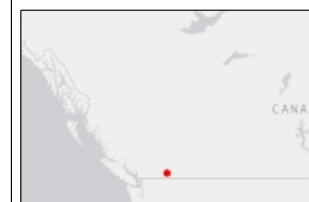
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CAUTION: Maps obtained using this site are not designed to assist in navigation. These maps may be generalized and may not reflect current conditions. Uncharted hazards may exist. DO NOT USE THESE MAPS FOR NAVIGATIONAL PURPOSES.

Datum: NAD83
Projection: BC Albers

Key Map of British Columbia



APPENDIX 2 – Discharge Area Sizing

**Table 1 - Discharge Area Sizing For
4-Bedroom House (Max. 2530 ft.² or 235 m²), Type 1 System,
2 ft. (0.6 m) Wide Trenches, 6 ft. (1.8 m) Spacing On-Centre, Slopes < 5 %**

Hydraulic Loading Rate (litres/m ² /day)	Total Length of Trenches (m)	Layout (# of lines by length in m)	Min. Area for 2 Fields (m ²)	Min. Area for 2 Fields + 10%
39	73	3 x 24.2	232	256
34	83	4 x 21	277	305
29	98	4 x 24.5	323	356
25	113	5 x 22.7	381	419
20	142	6 x 23.6	481	530
15	189	6 x 31.5	643	707
10	283	10 x 28.3	985	1083

More area is required to install trenches on a slope because the installation must follow the natural contours of the land. Developers will be required to allow for larger discharge areas and protect these area(s) by covenant if the lots are small or the area suitable for effluent discharge is limited.

For slopes of 5% and greater: Add 1% for each percent of slope. This is in addition to the 10% added in the initial calculation of basic field size. For example, for a 15 percent slope, add 15 percent to the size given in Table 1, last column.

Example: For a HLR of 15 l/m²/day and a slope of 25%, determine from the table that 707 m² is needed, then add 25% more for the slope, yielding 884 m². For example, a designated area of 32 m by 27.6 m, or an area of 30 m by 29.5 m could be considered. To establish a restrictive covenant area, add 3 m on all sides. The 30 x 29.5 m area becomes 36 m x 35.5 m, which is a total covenant area of 1278 m².

Note: The sizes given in Table 1 are calculated using a particular configuration of field lines. The calculations can be done using different configurations and the end result will differ slightly. The sizing table is a guideline for *typically* required discharge areas.

**DEANSTECH CONSULTING Ltd.
SEWAGE DISPERSAL – GENERAL CONDITIONS**

Page 1 of 1

This report incorporates and is subject to these “General Conditions”.

1. USE OF REPORT AND OWNERSHIP

This sewage dispersal report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary assessment. This report and the recommendations contained in it are intended for the sole use of DeansTech's client. DeansTech does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than DeansTech's client unless otherwise authorized in writing by DeansTech. Any unauthorized use of the report is at the sole risk of the user. This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of DeansTech. Additional copies of the report, if required, may be obtained upon request.

2. NATURE AND EXACTNESS OF DATA

Some data reviewed during this assessment was produced by others and has been relied upon by DeansTech to form opinions of the site. The accuracy of the data reviewed has not been confirmed. Some data was collected from sources readily available to the public. Other data and information was obtained from the client for use in this report.

3. LOGS OF TEST HOLES AND WATER WELL RECORDS

The test hole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples carried out by others. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance, which requires precise definition of soil or rock zone transition elevations, may require further investigation and review.

4. STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from the information reviewed. Stratigraphy is known only at the location of the drill hole/testpit or other drill holes/testpits in the area. Actual geology and stratigraphy between drill holes/testpits and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historic environment. DeansTech does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional investigation and review may be necessary.

5. SURFACE WATER AND GROUNDWATER CONDITIONS

Surface and groundwater conditions mentioned in this report are those observed at the times recorded in the report. These conditions vary with geological detail between observation sites; annual, seasonal and special meteorologic conditions; and with development activity. Interpretation of water conditions from observations and records is judgmental and constitutes an evaluation of circumstances as influenced by geology, meteorology and development activity. Deviations from these observations may occur during the course of development activities.

6. WATER QUALITY

Water quality information was based on the results of water samples obtained from the well(s). The chemical analysis results can vary from season to season and at different depths within a well.

7. STANDARD OF CARE

Services performed by DeansTech for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practising under similar conditions in the jurisdiction in which the services are provided. Technical judgment has been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of this report.

DeansTech



BOUNDARY MUSEUM

6145 Reservoir Road, Grand Forks, BC V0H 1H5
Ph/fax: 250-442-3737, boundarymuse@shaw.ca
<http://www.boundarymuseum.com/>

April 11, 2018

Regional District Boundary Kootenay
202 – 843 Rossland Ave
Trail, BC V1R 4S8

Dear Roly:

Please find enclosed our grant application for your Community Works Funding grant. This will start and continue to completion, phase 1 of our 40' X 60' Exhibition Building Extension project.

If you need any other paper work to support this grant, please do not hesitate to contact us at 250-442-3737.

Thank you for your consideration of this grant application.

Sincerely,

Lee Derhousoff
President – Boundary Museum Society

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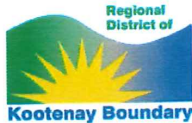
APR 11 2018

**REGIONAL DISTRICT OF
KOOTENAY BOUNDARY**

BOUNDARY MUSEUM SOCIETY**BOARD OF DIRECTORS & STAFF April 3, 2018 REVISED**

Position Held	Full Name	Phone No.	Email Address	Residential Address	Mail Address	Postal Code
PRESIDENT/CHAIR	Lee Derhousoff	250-442-2054	lee.derhousoff@gmail.com	3480 Davy Rd	Same	V0H 1H2
VICE-PRESIDENT	Bob McTavish	250-442-8486	1bobmct@gmail.com	1771-68th Ave	Box 1974	V0H 1H0
	Bob McTavish	cell 250-584-9000				
SECRETARY	Monica Coleshill	250-442-5925	monica.coleshill@gmail.com	4055 Victoria Rd	Same	V0H 1H5
TREASURER	Kathy Rush	250-442-2630	k.rush@shaw.ca	7105 North Fork Rd	Same	V0H 1H2
DIRECTOR	Laura Lodder	250-442-8495	tlodder@telus.net	5075 Lodder Rd	Same	V0H 1H4
DIRECTOR	Joe Tatangelo	250-447-9345	bcioey68@gmail.com	45 Franson Rd, Clake 1E2	Same	V0H 1E2
DIRECTOR	Sam Semenoff	250-442-8354	snlsemennoff@gmail.com	8235 Outlook Road	Same	V0H 1H2

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 KOOTENAY BOUNDARY



Federal/Provincial Gas Tax Funding Application

Application Date April 9, 2018

Project Title Boundary Museum Society's 40 'X 40' Exhibition Extension Project

Applicant Contact Information:

Name of Organization	Boundary Museum Society		
Address	6145 Reservoir Road, Grand Forks, BC, V0H 1H5		
Phone No.	250-442-3737	Fax No.	
Email Address	boundarymuse@shaw.ca		

Director(s) in Support
Of Project

Roly Russel

Area

D

Amount Required

\$ 60,000.00

Do not include GST if you have a GST account with CRA

Land Ownership – Please check one of the following:

- ☐ The applicant is the owner of the property
- ☐ The property is Crown Land. Tenure/license number

Do you have the land owner's written approval to complete the works on the land(s)?

- ☒ Yes (include copies of permits)
- ☐ No

Ownership and Legal Description details are required for all parcels of land on which the proposed works will occur.

Registered Owners of Land	Legal Description of land(s)
USCC	Lot S 1/2 of 20, D.L. 453, Plan 8515 SDYD

APR 11 2018

REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

202-843 Rossland Ave Trail, British Columbia Canada V1R 4S8
Toll-free: 1 800 355 7352 · tel: 250 368-9148 · fax: 250 368-3990
Email: admin@rdkb.com · web: rdkb.com



COPY

*Box 760
Grand Forks, BC V0H 1H0*

*Telephone: (250) 442-8252
1-877-662-4646*

*Fax: (250) 442-3433
Email: gadmin@uscc.ca*

February 26, 2018

Boundary Museum
6145 Reservoir Road
Grand Forks, BC
V0H 1H5

Attention: Sam Semenoff, Director

Dear Sam,

I am pleased to advise your Board that at our February 22, 2018 Executive Committee Meeting of the USCC, your request for the extension of 40' x 60' onto the existing 40' x 40' Black Hawk Livery Building at 6145 Reservoir Road, Grand Forks, BC, Lot S ½ of 20, D.L. 453, Plan 8515 SDYD was discussed and approval given to proceed.

We trust this extension will be under the direction of certified individuals and all codes and guidelines will be adhered to.

We look forward to the completion of this project.

Warmest regards,

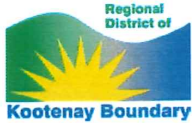
JJ Verigin, Executive Director

JJV:bn

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**REGIONAL DISTRICT OF
KOOTENAY BOUNDARY**



Application Contents – must include all of the following:

1. Description of the project including management framework
2. Project Budget including project costs (E.g. employee, equipment, etc.)
3. Outline of project accountability including Final Report and financial statements

1. Eligible Project Description including timeline:

The Boundary Museum Society are planning to build a 40' X 60' addition to our existing 40' X 40' Black Hawk Livery building. This addition is to house four 1901 - 1949 restored pumpers and fire trucks as well as some fire fighting equipment. With a few of our local rural fire halls set to be closed we feel that this would be a perfect place to have them on display. This is a great opportunity for our community. It will also attract tourists from far and wide and bring tourist dollars to our beautiful community for all to benefit.

The first phase of the project is to excavate the area to pour the concrete for the foundation once the footings are completed.

Our projected costs come close to \$58,000.00 for the first phase and we have already paid our engineer WSA Engineering (2012) Ltd to prepare the drawings for this project. The amount paid was \$2635.50. (see invoice enclosed) We will ensure that the funds received will be only used for the project alone. They will be deposited in a separate project account so all expenses can be kept track of in the proper manner.

Once we receive the money, we will start on the project as soon as possible so we can have it finished sometime in the early summer, hopefully by the end of July.

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 KOOTENAY BOUNDARY

COPY

10

BOUNDARY MUSEUM SOCIETY

PROJECT ACCOUNT

6145 RESERVOIR RD, GRAND FORKS BC V0H 1H5

TEL (250) 442-3737

DATE ~~1829~~ 2017PAY TO THE
ORDER OF

WSA ENGINEERING (2012) Ltd

\$ 2,635.50

Two thousand six hundred thirty five and 50/100 DOLLARS

GRAND FORKS CREDIT UNION
447 MARKET AVENUE, BOX 2500
GRAND FORKS BC V0H 1H0 250-442-5511

BOUNDARY MUSEUM SOCIETY

Lee Darchouff

Maurice Colquhoun

MEMO

INV 11211

⑈00010⑈ ⑆20500⑈809⑆ 100001903228⑈

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REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

Mailed Jan 22/18 JS


WSA Engineering (2012) Ltd

2248 Columbia Ave Castlegar, BC V1N 2X1 E-mail gwenh@wsaeng.ca Phone # 1-888-617-6927

Invoice Date: 12/10/2017

Invoice #: 11211

Invoice submitted to:

 Boundary Museum Society
 6145 Reservoir Road
 Grand Forks, BC
 V0H 1H5

In Reference To: 40 x 60 Building
 Project #: C17001 - 043.2

INTERIM INVOICE
Professional Services

	<u>Amount</u>
Initial Site Visit & Concept Review	800.00
Preliminary Drawings to 80%	1,600.00
Administration	110.00
GST on sales	125.50

	<u>Subtotal</u>	<u>\$2,510.00</u>
--	-----------------	-------------------

	Sales Tax Total	\$125.50
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	Total This Invoice	<u>\$2,635.50</u>
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	Payments/Credits	<u>\$0.00</u>
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	Total Including Outstanding	\$2,635.50
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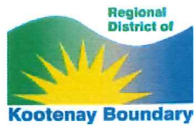
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 REGIONAL DISTRICT OF
 KOOTENAY BOUNDARY

TERMS: Due and Payable Upon Receipt.
 INTEREST AT 2% PER MONTH ON OUTSTANDING BALANCE
 We accept E-Transfers, Mastercard and Visa, however due to processing
 charges by credit card companies a 3% fee will be added to invoices over the
 amount of \$1500.00

APPROVED BY:

GST/HST No. 817351307



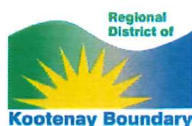
1.1 Project Impact:

We expect the project impact to be huge. Phase two is to construct the 40' X 60' building on the foundation. Once it is complete, it will bring in the local people and tourists. The fire trucks exhibit alone will be a huge draw from far and wide, which will impact the tourist trade in our entire community. It will also give us the extra room we desperately need to display more of our artifacts that we have in storage. We are actively applying for other grants for phase two - the actual building of the structure.

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1.2 Project Outcomes:

Locally, the successful completion of this project is an important step in continuing to grow the tourism sector. The Boundary Museum Society is recognized as a leader in the tourism market as it promotes and markets the region to "increase the length of tourist season in Boundary Country and to improve the overall financial sustainability of the tourism sector. The completion of the "Boundary Museum Exhibition Building Project" will be a draw for this location and is expected to provide an increase in visits to this site, and a benefit to the bottom line. Additionally, this project provides an accessible venue for residents and tourist alike to view these important artifacts.

The project has widespread support from local stakeholders. Regional Visitor Information Centres are prepared to promote this new exhibit and School District #51 (which already conducts annual field trips to the Boundary Museum from the eight schools in the region) are excited about the project which provides a safe-and accessible venue for youth in the region to learn more about the region's history, thereby enriching educational opportunities in the Boundary. The region's rural volunteer fire department is appreciative as this project means the pumper trucks will be stored safely in a sustainable manner and will be accessible to the community.

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202-843 Rossland Ave Trail, British Columbia Canada V1R 4S8
 Toll-free: 1 800 355 7352 · tel: 250 368-9148 · fax: 250 368-3990
 Email: admin@rdkb.com · web: rdkb.com



ENGINEERING (2012) LTD
2248 Columbia Avenue Castlegar, BC V1N 2X1

Tel 1-888-617-6927
e-mail: mail@wsaeng.ca

September 14, 2017

Project Number: C17001 – 043.2

Boundary Museum – 40' x 60' Building Addition – Project Quote

Phase 1 – Artifact Storage Building		
Task:	Estimated Start	Estimated Cost:
Construction Period		
Supply & Install Foundation & Concrete Slab		
• Excavation	Start Week 5 (Duration: 1 Week)	\$10,8000.00
• Set Forms & Pour Footing.	Start Week 6 (Duration: 0.5 Weeks)	\$8,100.00
• Set Forms & Pour Foundation Wall	Start Week 6 (Duration: 0.5 Weeks)	\$14,175.00
• Insulate & Backfill	Start Week 7 (Duration: 1 Week)	\$5,400.00
• Prep & Pour Slab	Start Week 8 (Duration: 1 Week)	\$19,440.00

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REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

Additional Budget Information

1) Invoice for WSA Engineering (2012) Ltd for drawing up plans

3. Accountability Framework:

The Eligible Recipient will ensure the following:

- Net incremental capital spending is on infrastructure or capacity building
- Funding is used for Eligible Projects and Eligible Costs
- Project is implemented in diligent and timely manner
- Provide access to all records
- Comply with legislated environmental assessment requirements and implement environmental impact mitigation measures
- **Provision of a Final Report including copies of all invoices**

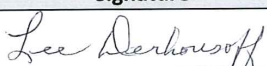
Schedule of Payments

The RDKB shall pay the Proponent in accordance with the following schedule of payments:

- (a) 75% upon signing of the Contract Agreement;
- (b) 25% upon receipt of progress report indicating 75% completion of the Project and a statement of income and expenses for the Project to that point.

By signing below, the recipient agrees to prepare and submit a summary final report outlining project outcomes that were achieved and information on the degree to which the project has contributed to the objectives of cleaner air, cleaner water or reduced greenhouse gas emissions. This must also include financial information such as revenue and expenses.

In addition, an annual report (for 5 years) is to be submitted to the RDKB prior to October 31st of each year detailing the impact of the project on economic growth, a clean environment, and/or strong cities and communities.

Signature	Name	Date
	LEE DERHOUSOFF	April 10 / 18

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APR 11 2018

REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

202-843 Rossland Ave Trail, British Columbia Canada V1R 4S8
Toll-free: 1 800 355 7352 · tel: 250 368-9148 · fax: 250 368-3990
Email: admin@rdkb.com · web: rdkb.com

M E M O R A N D U M

TO: Director Ali Grieve, Electoral Area 'A'

FROM: Melissa Zahn - Accounting Clerk

RE: Grants-In-Aid 2018

Balance Remaining from 2017	-\$	1,066.32
2018 Requisition	\$	31,516.00
Less Board Fee 2018	\$	(1,216.00)

Total Funds Available:	\$	29,233.68
------------------------	----	-----------

RESOLUTION #	DATE	RECIPIENT	DESCRIPTION	AMOUNT
405-17	Oct-17	Beaver Valley Nitehawks	Cost of repairs to bus	\$ 1,500.00
28-18	Jan-18	Tourism Rossland Society	Donation level advertising on Ski Bus	\$ 100.00
28-18		Beaver Valley May Days Society	May Day events	\$ 4,000.00
28-18		Village of Fruitvale	Annual Jingle Down Main events	\$ 1,500.00
78-18	Jan-18	Diane Langman	"Us and Them" movie	\$ 250.00
78-18		Beaver Valley Nitehawks	Assist with operating budget	\$ 1,300.00
78-18		Village of Montrose	BC Family Day events	\$ 300.00
78-18		Zone 6 Kootenay Boundary 55+ Games	Assist with preparation/participation costs	\$ 500.00
113-18	Feb-18	Beaver Valley Recreation	Senior's dinner & dance catering	\$ 1,600.00
113-18		Arthritis Society	Assist with cost of Arthritis Walk	\$ 375.00
156-18	Mar-18	Community Futures Development Corp. Trail	Assist with costs of the 4th Junior Dragon Den	\$ 500.00
156-18		Special Olympics BC - Trail	Assist with funding for Special Olympics Programming	\$ 500.00
156-18		Champion Lakes Golf Course	Assist with improvement to patio	\$ 1,000.00
156-18		Beaver Valley Golf & Country Club	Renewal of one year of fee box advertisement	\$ 210.00
156-18		JL Crowe Secondary	2018 Grad Scholarship	\$ 750.00
170-18	Mar-18	Trail Minor Baseball	2018 Little League Provincials	\$ 500.00
170-18		Village of Montrose	Montrose Family Fun Day	\$ 500.00
180-18		Village of Fruitvale	Senior's Gym	\$ 3,100.00
180-18		Beaver Valley Blooming Society	Filling the flower tubs	\$ 2,000.00
222-18	Apr-18	BV Avalanche Hockey Club	KBRH Health Foundation Fundraising	\$ 1,000.00
		Trail Curling Association	BC Senior Games	\$ 1,000.00
Total				\$ 22,485.00
Balance Remaining				\$ 6,748.68

MEMORANDUM

TO: Director Linda Worley, Electoral Area 'B' /Lower Columbia-Old Glory

FROM: Melissa Zahn - Accounting Clerk

RE: Grants-In-Aid 2018

Balance Remaining from 2017	\$	1,911.62
2018 Requisition	\$	22,779.00
Less Board Fee 2018	\$	(879.00)

Total Funds Available:	\$	23,811.62
------------------------	----	-----------

RESOLUTION #	DATE	RECIPIENT	DESCRIPTION	AMOUNT
78-18	Jan-18	Diane Langman	"Us and Them" movie	\$ 250.00
78-18		Zone 6 Kootenay Boundary 55+ Games	Assist with preparation/participation	\$ 750.00
113-18	Feb-18	Arthritis Society	To assist with cost of Arthritis Walk	\$ 375.00
		Special Olympics BC - Trail	To assist with funding for Trail Special	
156-18	Mar-18		Olympics Programming	\$ 2,500.00
156-18		JL Crowe	2018 Grad Scholarship	\$ 750.00
170-18	Mar-18	Trail Minor Baseball	2018 Little League Provincials	\$ 500.00
170-18	Mar-18	West Kootenay Smoken Steel Car Club	Food, promotions, etc...	\$ 4,000.00
222-18	Apr-18	Trail Curling Association	BC Senior Games	\$ 2,000.00

Total	\$	<u>11,125.00</u>
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Balance Remaining	\$	<u>12,686.62</u>
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M E M O R A N D U M

TO: Director Grace McGregor, Electoral Area 'C'/Christina Lake

FROM: Melissa Zahn - Accounting Clerk

RE: Grants-In-Aid 2018

Balance Remaining from 2017	\$	18,182.27
2018 Requisition	\$	60,640.00
Less Board Fee 2018	\$	(2,340.00)

Total Funds Available:	\$	76,482.27
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RESOLUTION #	DATE	RECIPIENT	DESCRIPTION	AMOUNT
28-18	Jan-18	Boundary Family & Individual Services Society	Help support the BF Café	\$ 1,000.00
78-18	Jan-18	Boundary Youth Soccer Association	Assist with operational costs	\$ 2,000.00
78-18		Zone 6 Kootenay Boundary 55+ Games	Assist with preparation/participation costs	\$ 750.00
113-18	Feb-18	Christina Lake Tourism Society	Assist with redesign of website	\$ 2,500.00
113-18		Boundary Museum Society	Assist with cost to upgrade basement office	\$ 4,000.00
156-18	Mar-18	Christina Lake Stewardship Society	Purchase of full size billboard	\$ 1,785.95
156-18		Christina Lake Stewardship Society	Assist with 18th annual lake Clean Up Day	\$ 1,500.00
		Christina Lake Stewardship Society	Assist with Christina Lake Watershed	
156-18			Management Plan Annual Review Meeting	\$ 2,500.00
		Christina Lake Stewardship Society	Assist with Christina Lake Northern Pike	
156-18			Challenge	\$ 500.00
156-18		Little Lakers Learning Centre Society	Assist with Little Lakers Learning Centre Society	\$ 2,500.00
170-18	Mar-18	Boundary Country Regional Chamber of Commerce	Networking, training, workshops, etc...	\$ 2,500.00
222-18	Apr-18	Christina Lake Tourism Society	Business and Visitor Service Training Sessions	\$ 2,300.00

Total	\$	23,835.95
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Balance Remaining	\$	52,646.32
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M E M O R A N D U M

TO: Director Roly Russell, Electoral Area 'D'/Rural Grand Forks
 FROM: Melissa Zahn - Accounting Clerk
 RE: Grants-In-Aid 2018

Balance Remaining from 2017	\$	26,704.00
2018 Requisition	\$	38,485.00
Less Board Fee 2018	\$	(1,485.00)

Total Funds Available:	\$	63,704.00
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RESOLUTION #	DATE	RECIPIENT	DESCRIPTION	AMOUNT
28-18	Jan-18	Boundary Family & Individual Services Society	Help support the BF Cafe	\$ 1,000.00
78-18	Jan-18	Grand Forks & District Fall Fair	Storage area remedial work	\$ 1,317.00
113-18	Feb-18	Boundary Youth Soccer Association	Assist with operational costs	\$ 2,000.00
156-18	Mar-18	British Columbia Conservation Foundation	To expand the WildSafe Bc program	\$ 500.00
		Boundary Musical & Theatre Society	Assist with Beauty and the Beast Production	\$ 500.00
156-18		Boundary Wood Workers Guild	Assist with Upgrading of Lighting	\$ 1,000.00
156-18		Rotary Club of Grand Forks	Assist with funding of 2017 Fireworks	\$ 2,000.00
		British Columbia Conservation Foundation	Cancelled as unable to provide program in GF	\$ -
156-18	Mar-18	Grand Forks Art Gallery - Gallery 2	Assist with telephone system replacement	\$ 5,000.00
222-18	Apr-18	Boundary Country Regional Chamber of Commerce	Workshops, seminar, training	\$ 2,500.00
		Grand Forks Junior Ultimate Program	Grand Forks Junior Ultimate Program	\$ 400.00
Total				\$ 15,717.00
Balance Remaining				\$ 47,987.00

MEMORANDUM

TO: Director Vicki Gee, Electoral Area 'E'/West Boundary

FROM: Melissa Zahn - Accounting Clerk

RE: Grants-In-Aid 2018

Balance Remaining from 2017	\$	24,657.51
2018 Requisition	\$	86,748.00
Less Board Fee 2018	\$	(3,348.00)

Total Funds Available:	\$	108,057.51
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RESOLUTION #	DATE	RECIPIENT	DESCRIPTION	AMOUNT
28-18	Jan-18	Trails to Boundary Society	Support website administrator	\$ 1,000.00
113-18	Feb-18	Boundary Central Secondary School	Foodsafe training for 20 students	\$ 1,000.00
113-18		Bristish Columbia Conservation Foundation	To expand the WildSafe Bc program	\$ 1,000.00
113-18		Bristish Columbia Conservation Foundation	Cancelled as unable to provide program in	\$ 1,000.00
222-18	Apr-18	Boundary All Nations Aboriginal Council	Celebration of National Indigenous Day	\$ 1,000.00
		West Boundary Sustainable Foods and Resources Society	To assist with seed savings in the West Boundary	\$ 500.00
Total				\$ 3,500.00
Balance Remaining				\$ 104,557.51

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
April 30, 2018**

A

ELECTORAL AREA 'A'

	Description	Status	Allocation	
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Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$	96,854.94
Allocation to Dec 31, 2008	Received		46,451.80
Allocation to Dec 31, 2009	Received		91,051.00
Allocation to Dec 31, 2010	Received		89,796.00
Allocation to Dec 31, 2011	Received		89,788.04
Allocation to Dec 31, 2012	Received		87,202.80
Allocation to Dec 31, 2013	Received		87,167.87
Allocation to Dec 31, 2014	Received		84,868.70
Allocation to Dec 31, 2015	Received		84,868.70
Allocation to Dec 31, 2016	Received		87,726.69
Allocation to Dec 31, 2017	Received		88,649.64
Allocation to Dec 31, 2018	Estimated		91,749.63

TOTAL AVAILABLE FOR PROJECTS

\$ 1,026,175.81**Expenditures:**

Approved Projects:

2009	Columbia Gardens Water Upgrade	Completed	\$	250,000.00
2011	South Columbia SAR Hall	Completed		2,665.60
281-13	BV Family Park - Solar Hot Water	Completed		16,684.00
451-13	Beaver Valley Arena - Lighting	Completed		69,000.00
26-14	LWMP Stage II Planning Process	Completed		805.88
		Pending or		
17-15	Beaver Creek Park - Band Shell/Arbour	Committed		100,000.00
61-17	Fruitvale Elementary Playground -PAC LEAP Project	Funded		20,000.00
126-17	RDKB BVPART (Electrical Upgrade BV Family Park)	Funded		5,327.25
		Pending or		
	RDKB BVPART (Electrical Upgrade BV Family Park)	Committed		4,672.75
153-17	Village of Fruitvale (Fruitvale RV Park)	Funded		52,500.00
		Pending or		
	Village of Fruitvale (Fruitvale RV Park)	Committed		17,500.00
		Pending or		
77-18	Village of Fruitvale (Construction of Replica Train Static	Committed		150,000.00

TOTAL SPENT OR COMMITTED

\$ 689,155.48

TOTAL REMAINING

\$ 337,020.33

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
April 30, 2018**

ELECTORAL AREA 'B' / LOWER COLUMBIA/OLD GLORY

	Description	Status	Allocation	
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Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$ 69,049.93
Allocation to Dec 31, 2008	Received	33,116.46
Allocation to Dec 31, 2009	Received	64,912.00
Allocation to Dec 31, 2010	Received	64,017.00
Allocation to Dec 31, 2011	Received	64,010.00
Allocation to Dec 31, 2012	Received	65,936.00
Allocation to Dec 31, 2013	Received	65,907.41
Allocation to Dec 31, 2014	Received	64,169.02
Allocation to Dec 31, 2015	Received	64,169.02
Allocation to Dec 31, 2016	Received	66,329.94
Allocation to Dec 31, 2017	Received	67,600.62
Allocation to Dec 31, 2018	Estimated	69,964.55

TOTAL AVAILABLE FOR PROJECTS

\$ 759,181.95

Expenditures:

Approved Projects:

8547	GID - Groundwater Protection Plan	Completed	\$ 10,000.00
11206	GID - Reducing Station (Advance)2008	Completed	16,000.00
2009	GID - Reducing Station (Balance)	Completed	14,000.00
2009	GID - Upgrades to SCADA	Completed	22,595.50
2009	Casino Recreation - Furnace	Completed	3,200.00
Phase 1	GID - Pipe Replacement/Upgrades	Completed	60,000.00
Phase 2	Looping/China Creek	Completed	18,306.25
2012	Rivervale Water SCADA Upgrade	Completed	21,570.92
2013	Rossland-Trail Country Club Pump	Completed	20,000.00
261-14	Rivervale Water & Streetlighting Utility	Completed	20,000.00
262-14	Genelle Imp. District - Water Reservoir	Completed	125,000.00
263-14	Oasis Imp. District - Water Well	Completed	34,918.00
	Castlegar Nordic Ski Club (Paulson Cross		
251-15	Country Ski Trail Upgrade)	Completed	10,000.00
	Black Jack Cross Country Ski Club Society		
252-15	(Snow Cat)	Completed	10,000.00
	Rivervale Water & Streetlighting Utility (LED		
253-15	Streetlights)	Completed	14,417.00
254-15	Rivervale Oasis Sewer Utility (Flow Meters)	Completed	90,000.00
	Rivervale Oasis Sewer Utility - RDKB (Wemco		
190-16	Booster Pumps)	Pending or	
221-16	Area 'B' Recreation - RDKB (Rivervale Shed)	Committed	88,159.66
	Rossland Historical Museum and Archive		
152-17	Association (Rossland Museum Upgrades)	Completed	8,632.00
	Rossland Historical Museum and Archive		
	Association (Rossland Museum Upgrades)	Funded	18,750.00
	Visions for Small Schools Society (Broadband	Pending or	
296-17	Installation)	Committed	6,250.00
	Birchbank Golf Club (Upgrade Irrigation		
111-18	Satellite Controller)	Funded	13,381.80
		Pending or	
		Committed	50,000.00

TOTAL SPENT OR COMMITTED

\$ 675,181.13

TOTAL REMAINING

\$ 84,000.82

Status Report - Gas Tax Agreement Electoral Area 'C' / Christina Lake			
361-15	Christina Lake Boat Access Society (Redesign Texas Point Boat Launch Parking)	Funded	22,500.00
	Christina Lake Boat Access Society (Redesign Texas Point Boat Launch Parking)	Pending or Committed	7,500.00
80-16	Christina Lake Community Association (Installation Make-Up Air System Shortfall)	Completed	6,263.75
271-16	RDKB (Boundary Agricultural & Food Project)	Funded	1,112.24
	RDKB (Boundary Agricultural & Food Project)	Pending or Committed	1,017.47
269-16	RDKB C.L. Solar Aquatic System (Plant Rack)	Completed	7,384.83
404-17	RDKB CL PARTS (New Washrooms @ Pickleball/Tennis Courts)	Funded	15,000.00
76-18	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Funded	1,550.65
	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Pending or Committed	9,752.68
TOTAL SPENT OR COMMITTED			\$ 491,210.17
TOTAL REMAINING			\$ 260,556.57

Status Report - Gas Tax Agreement Electoral Area 'D' / Grand Forks Rural			
293-16	Grand Forks Aquatic Center (Underwater LED Light Replacement)	Funded	11,508.76
451-16	Phoenix Cross Country Ski Society (Trail Grooming Machine)	Completed	20,512.33
467-17	RDKB (Boundary Transit Capital Funding)	Funded	5,889.00
468-17	RDKB (Boundary Trails Master Plan)	Funded	13,108.73
	RDKB (Boundary Trails Master Plan)	Pending or Committed	6,891.27
76-18	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Funded	1,550.65
	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Pending or Committed	9,752.68
112-18	Grand Forks Community Trails Society (North Fork Trans Canada Trail Surface Installation)	Pending or Committed	50,000.00
TOTAL SPENT OR COMMITTED			\$ 735,801.54
TOTAL REMAINING			\$ 978,774.85

Status Report - Gas Tax Agreements Electoral Area 'E' / West Boundary			
343-15	Trails to the Boundary Society (Trans-Canada Trail Between Mccullock and Eholt)	Funded	29,574.09
81-16	Kettle Valley Golf Club (Pump House Renovation Project)	Completed	10,123.48
110-16	Kettle Wildlife Association (Parking/Water/Electrical Upgrades)	Completed	24,717.57
182-16	Rock Creek Community Medical Society (Roof and Floor Replacement RC Health Centre)	Completed	22,675.68
183-16	Kettle Wildlife Association (Parking/Water/Electrical Upgrades Addiitonal)	Completed	3,744.15
271-16	RDKB (Boundary Agricultural & Food Project)	Funded	7,433.28
	RDKB (Boundary Agricultural & Food Project)	Pending or Committed	6,799.86
451-16	Phoenix Cross Country Ski Society (Trail Grooming Machine)	Completed	10,256.17
166-17	Beaverdell Community Club & Recreation Commission (Bleachers Beaverdell Ball Park)	Funded	7,178.90
	Beaverdell Community Club & Recreation Commission (Bleachers Beaverdell Ball Park)	Pending or Committed	2,392.96
198-17	Westbridge Recreation Society (Replace Kitchen Westbridge Hall)	Funded	20,699.41
468-17	RDKB (Boundary Trails Master Plan)	Funded	13,108.74
	RDKB (Boundary Trails Master Plan)	Pending or Committed	6,891.26
76-18	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Funded	1,550.65
	RDKB Kettle River Watershed Authority (Drought Management Plan) (\$11,303.33 is Approx Amount; Actual Allocation To Be Determined)	Pending or Committed	9,752.69
153-18	Westbridge Recreation Society (Door Upgrades/ LED Conversion/Curtains & Tracking System)	Funded	5,675.03
	Westbridge Recreation Society (Door Upgrades/ LED Conversion/Curtains & Tracking System)	Pending or Committed	1,891.67
154-18	Bridesville Community Club (Hall Addition)	Pending or Committed	70,000.00
TOTAL SPENT OR COMMITTED			\$ 762,212.03
TOTAL REMAINING			\$ 369,394.27